JENSEN SYSTEM OF MODELING

By

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JENSEN SYSTEM

OF

MODELING

EMPLOYING THE

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FOREWORD.

The greatest joys in life are found in the power of expression—in the ability to create something. For there is an infinite pleasure in seeing ones thoughts and tastes take visible form. That is why pläste papier modeling is so fascinating—but I wish to urge upon the student that the deeper he goes into this subject, the more absorbingly interesting will the study become.

So resolve to get all there is out of this course. There will be many, I realize, who will model without studying very seriously the lessons herein and still produce fairly good heads and derive much fun therefrom. But those who will apply themselves and study faithfully will find far greater interest in their work, and they will get expression and character in their modeled heads of which they may well be proud.

The study of the human form is limit-less. Even our foremost sculptors are ever studying to improve their knowledge and their work. The human head is the most beautiful object in the world. It is the subject of more paintings and sculpture than all other subjects and scenes combined. Hence the study of the face, and in fact the entire bust, by means of this System will rapidly develop in the student a sense of the artistic and the beautiful.

Pläste papier modeling has a glorious past. The U. S. Army used this method in the World War for making dummies to attract enemy fire and so learn their location, and in many other ways. In several

instances, a dead horse lying on No-Man's Land near the enemy trench, was replaced by a good duplicate made in pläste papier, and the observer would crawl into the paper horse before dawn each day and observe the enemies action all day at close range.

Great guns were imitated in this material and placed in the vicinity of real guns that were carefully concealed through camouflage. The Boche observers sent out to discover the location of the real batteries that were doing the havoc to the enemy would discover the paper guns only, and so the enemy artillery would train their fire on the dummy batteries and allow the real guns to continue their fire without being molested. The real guns were concealed by having their outlines painted out by means of broken forms of various colors painted all over the guns, and also covering the guns with foliage.

A great statue of Blackhawk, 25 feet high, was modeled in this material and waterproofed, just before the Blackhawk Division left Camp Grant, Ill., for France in July 1918. This work was done by the Blackhawk Division's Camouflage Dept., of which the writer was a member. It still stands, after these many months, defying the elements; the winds and rains and snows could not destroy it; and it still looks as permanent as though carved out of solid rock. It stands as a monument to those brave Blackhawks who gave up their lives overseas; to their memory this book is solemnly dedicated.

Arthur B. Jensen,
Senior Instructor.

Lieutenant Jensen before Blackhawk Statue modeled in plaste papier

PART 1—PLÄSTE PAPIER MODELING.

LESSON 1—GENERAL INSTRUCTIONS

There are those whose taste far excells the average artist, and yet who cannot even draw a line, far less model a figure, simply because they lack the mechanical skill to reproduce what they see and feel. **The Superskill Modeling Device** supplies this deficiency and enables a discerning brain to express itself with untrained and unskilled hands.

The Superskill makes of the beginner an expert draughtman at once, by supplying the correct proportions and true lines of the head, neck and shoulders. On the other hand, it leaves entirely to the modeler the creative, artistic part—the forming of the features and the expression of the face.

No expense has been spared in making the Superskill anatomically correct. In collaboration with eniment sculptors, an ideal head, medium between male and female, having lines that conform most closely to the average normal person, was modeled. From this, strips were made by the most expensive, and most accurate, process; being molded in genuine aluminum which reproduces precisely the most minute curves and formations of the original bust . These aluminum strips are light, durable, rust-proof and rigid; they will always retain their correct shape.

As to size, the Superskill conforms a little more to the male head and is a trifle larger than the average female head, which however is most desirable as heroic proportions add strength and charm to one's work, whereas if it were smaller than normal, the work appears weak and shriveled. All figures of old master sculptors stand seven feet or more.

Fig 10 A.

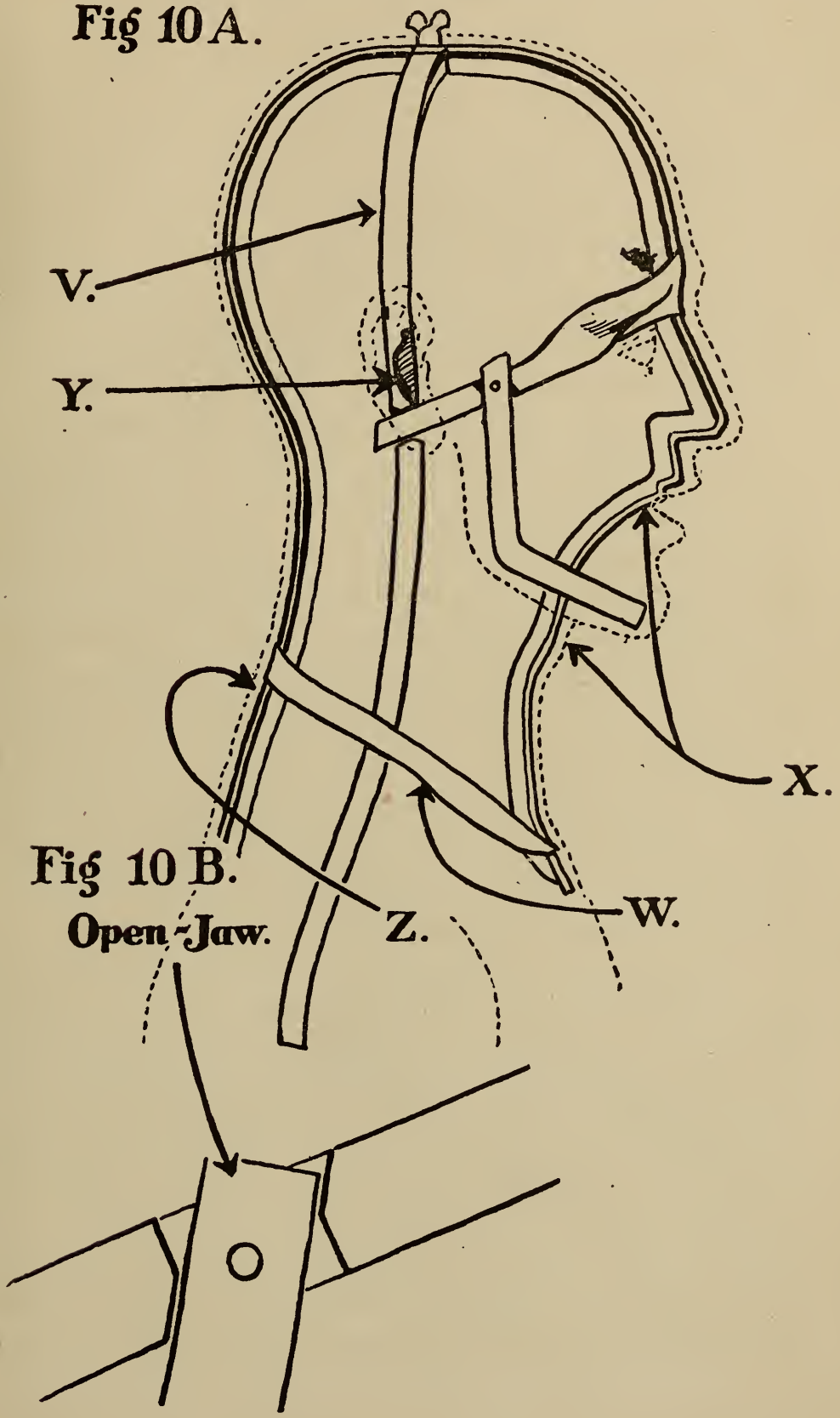


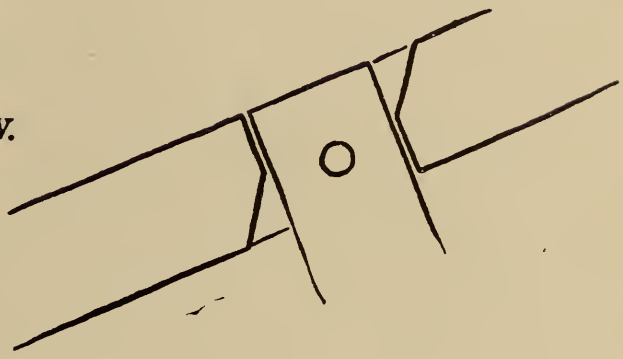
Fig 10 B.

With the **Superskill,** an extensive knowledge of anatomy is unnecessary; so this difficult and less interesting branch of art study can be practically eliminated from this course. Our study of the human form will deal chiefly with the surface formations and features. Those who have in the past modeled without the Superskill, will especially appreciate the fact that the very tedious work of taking measurements is also eliminated by this method.

A stick with one end on the floor and the other end 20 inches above the table or chair it is attached to, is used to support the Superskill modeling device. The stick is held loosely in place by means of a staple driven into the side of the table or a heavy piece of wood lying on the table. (See Figure 4). This permits the modeler to turn the Superskill around on the stick so that all sides of the head can be modeled without getting out of one's chair. Due to its patented notches, a child can put the Superskill together in a minutes time, and remove it from the shell just as quickly. One screw, with the aid of the notches, holds the entire device together.

Note figures 10a and 11a, and observe just what lines of the head the strips describe. **A** is the pit of the neck; **B** is where the jaw piece fits into the brow piece; **C** is base of the nose; **D** lies ½ inch in front of the highest part of the shoulder line; **V** is broadest point of the head; **W** marks the dividing line between the neck and the shoulders; **X** this part of the front vertical strip, between the upper teeth and the top of the neck, is simply to connect the vertical neck portion with the face portion, and does not describe

Fig 11 B.
Closed-Jaw.



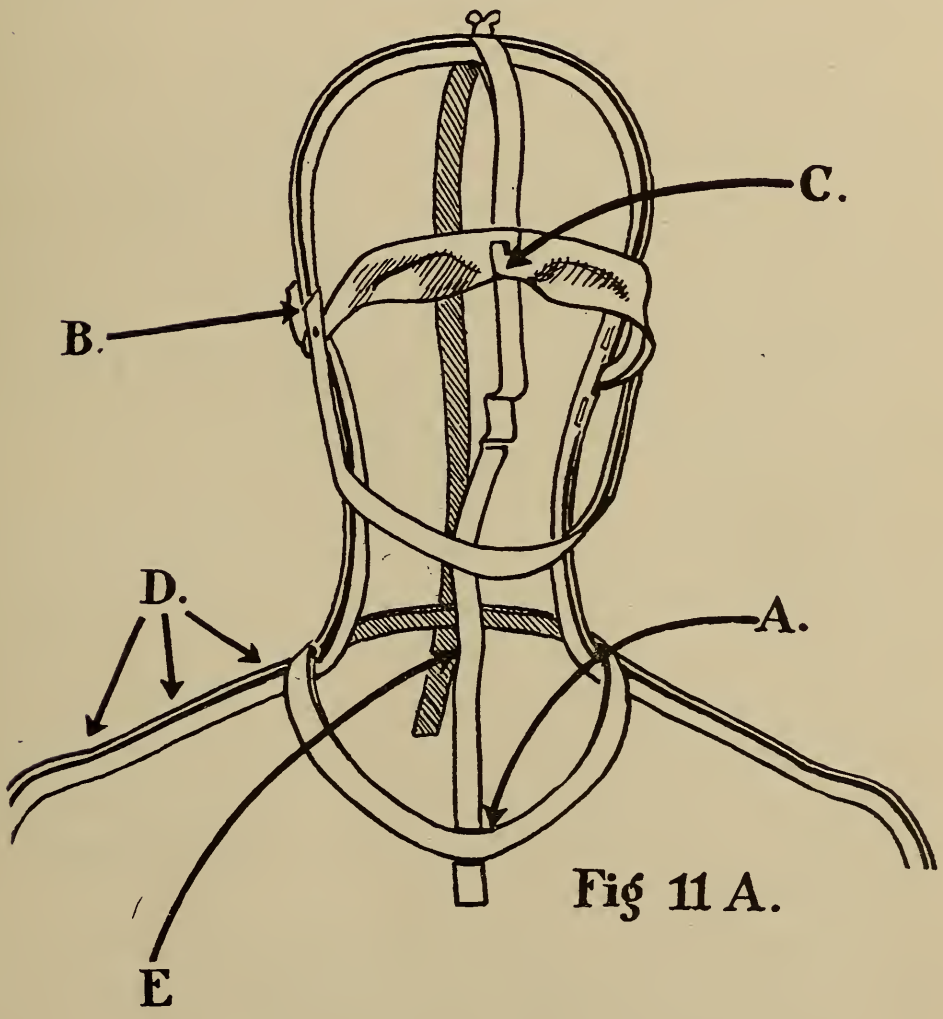


Fig 11 A.

any part of the anatomy, nor any of the lines of the face. The formation and location of the chin is to be secured from the jaw piece. **Y** This projection marks the point where the upper rear part of the ear is attached to the head. **Z** marks the seventh cervical vertebra, the highest vertebra that can be felt with the fingers easily.

Removing from the Shell. After the head has been modeled and the pläste-papier sufficiently hardened, the strips are removed thru the neck as follows:—

First; unscrew the thumb screw at the top of the head, taking the bust off of the stick. Then reach up into the hollow head and remove each piece from the head, first the right and left strips, then the rear and front strips, next the neck band, then the brow pieces and finally the jaw pieces. These two strips are made in two pieces because otherwise they would be too wide to remove through the neck, and so they should be taken out one piece at a time.

First Stage. Before attempting to model, study the features and the lines of the head of the folks of your household. Be analytical, notice the details you formerly overlooked. Be observing, let what your eyes see register in your brain. Sit before the mirror and study your features; mentally divide your face into planes; study the direction of every line; become acquainted with the formation of every feature.

Second Stage. Then, and not until then, pick up your lessons, 1 to 14 only at first, and study them thoughtfully, visualizing everything you read or see illustrated; scrutinize your own features and form

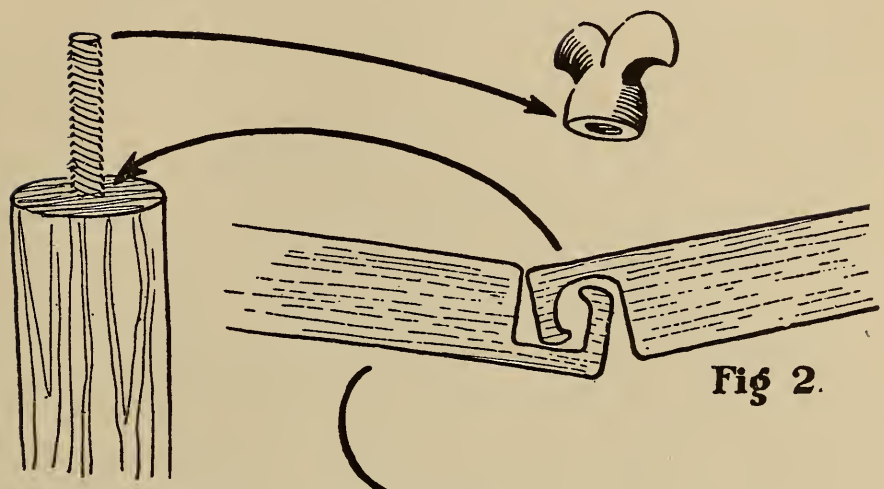


Fig 2.

Fig 1.

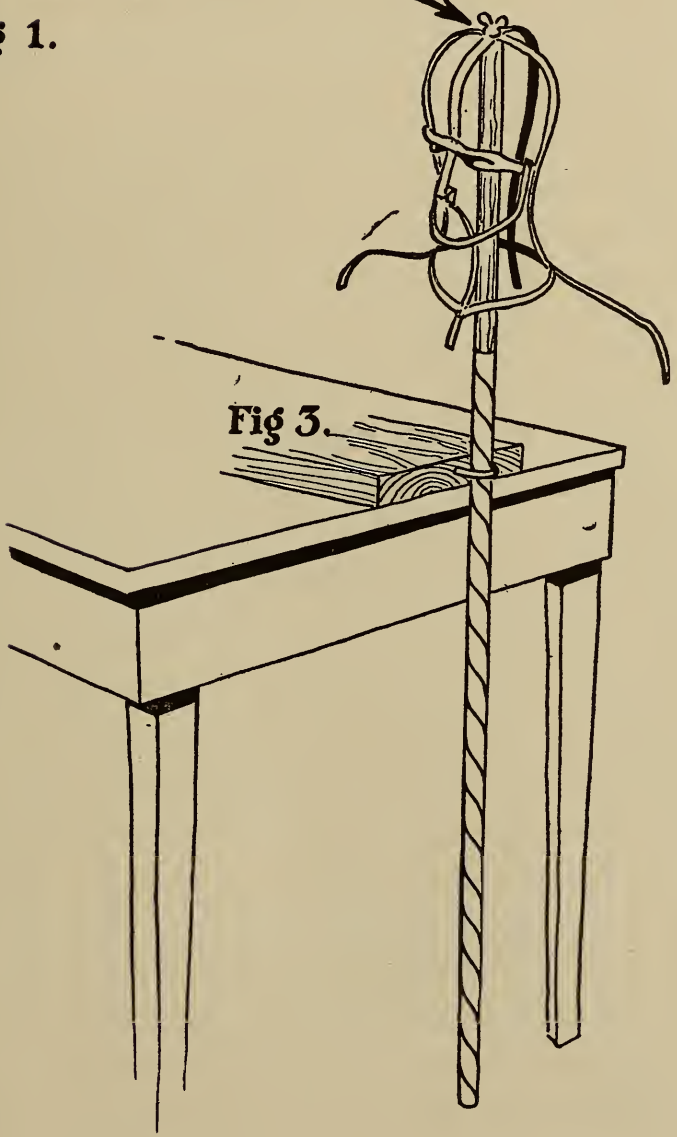


Fig 3.

as you read; remember that you are carrying a model on your shoulders that can be referred to at any time. If any words are unfamiliar, refer to the dictionary always, or you may lose important meanings. Strive to master the subject; to become expert in modeling.

Third Stage. Model slowly at first, having a reason for placing as you do each piece of plästepapier; do not go at it haphazardly and trust to luck. Errors can be corrected easy enough; (cutting away with the shears if necessary) but it is poor training.

Do not depend on memory or the illustrations entirely to secure the proper lines and features. If you cannot have a model who will sit for you for short periods, at least go over and study on some face the feature you are about to make. The most satisfactory method for the beginner is to secure a good plaster cast of some work of recognized merit to use as a model, or work before a mirror.

As you become proficient, likenesses can be made of your friends, but this should not be attempted at first. In making a portrait, produce his most characteristic expression; it may be a broad smile, showing the teeth; or with knitted eye brows and furrowed forehead in deep thought, or the like.

Change the view of the sitter frequently as well as the light that is placed on him. When comparing your work with your model, take care that you see them both from the same point of view. Study your work from every angle as you progress, from below, above and three-quarter view, as well as the front and profile views.

To Caricature means to exaggerate some

Fig 7.

Fig 8.

Fig 6.

Fig 9.

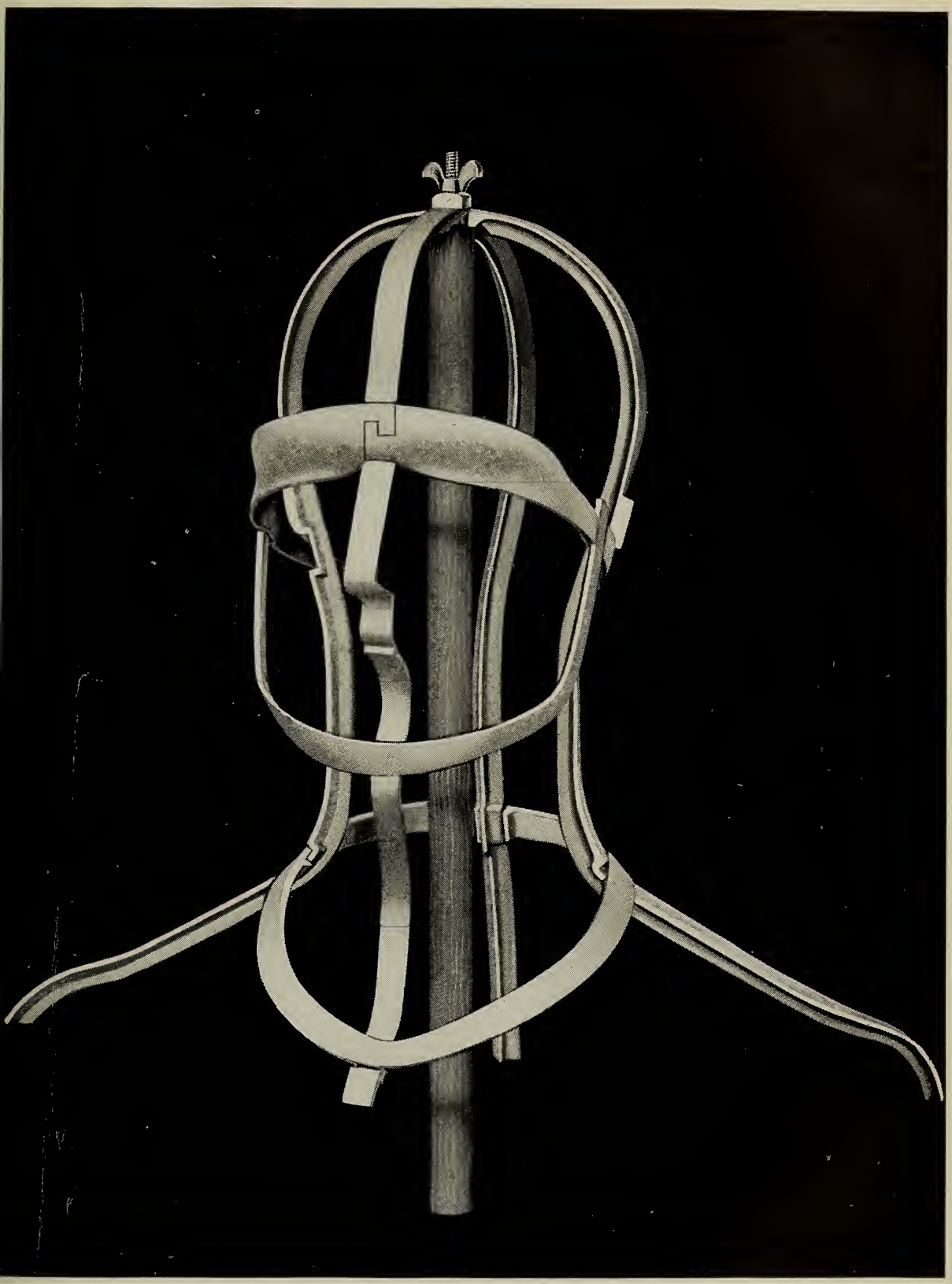
peculiar and unusual feature of the face, as for instance, the big teeth of our late "Teddy" were made ever bigger by our cartoonists. (See Figures 6 and 7).

To strike a semblance in someone who is sitting for you, it will make it easier if these marks of distinction are exaggerated slightly, but not so much that it caricatures them. On the other hand, as a source of fun, if no real portrait of the sitter is being attempted, a caricature can be made, in fact much easier in modeling than in drawing. If the peculiarity is not a mark of ugliness or weakness, there will be no offence taken but will be a source of great amusement.

Children, in modeling, should be encouraged to conform to the natural lines, but they may be allowed to occasionally go on an art spree and produce witches and the like, with long pointed red noses and chins, and etc. (See Figures 8 and 9).

Grotesque and ridiculous faces can be made for masque balls and the entire shell can be worn over the real head and made to look most natural. The head would have to be cut in half and then secured with cloth hinges. These false faces will delight the children too, all of whom play so well the game of make believe.

There are four methods of finishing up the heads: (1) They can be modeled entirely in pläste papier, and unpainted, the color values being obtained in the high lights and shadows. (2) They can be modeled entirely in pläste papier and then painted in the natural colors with water colors. This is the most pleasant way and secured the most interesting results. (3) The big planes can be modeled in the



THE SUPERSKILL MODELING DEVICE

—the Great Art Educator

pläste papier and the Oasis Clay used to secure the finished lines, although this treatment will not allow the heads to be much handled, as the clay will always be soft and pliable, nor will it allow the use of paints on this oily surface. However, it is most excellent for use in studying expressions, as one expression can be modeled in the Oasis Clay over the pläste papier and then this same clay can be pushed around into other expressions. The ordinary modeling clay cannot be used at all as it dries, cracks and falls off. (4) The pläste papier surface can be covered with Bronzola to produce most beautiful bronze statues, which is the best treatment if the bust is to be placed in the home for decorative purposes. Merely apply with the brush that is sent with the outfit.

LESSON 2—PLÄSTE PAPIER

Pläste-Papier is, in English, wrapping or building paper dipped in pläste, a substance which makes it plastic and pliable while modeling and lends strength and rigidity to it upon hardening. The common brown wrapping paper is the most satisfactory to use. The wrapping paper should be **torn** in pieces, which gives it a thin feather edge that is lost when modeled over other pieces, whereas a sharp cut edge would stand out sharply.

Use small pieces of paper, about 1x2 inches, until you learn to handle it better. The paper needs simply to be dipped for a moment into the pläste which should be of a heavy consistency that will drop freely from a spoon, but will not pour in an unbroken stream. Place the dry plaste in a small bowl and add cold or hot water gradually, stirring it, until the proper consistency is obtained. Being so easily prepared, it is desirable to make up only one day's supply at a time.

After the strips of the device have been attached securely to each other, model with short pieces of the pläste papier along the frame work, allowing it to stiffen somewhat before attempting to bridge the gaps between the aluminum strips, working in the meanwhile on another region of the bust. See Figure 12A. The first few pieces of pläste papier put on are the most important; therefore study Figure 12B carefully and see how each feature is started.

The first piece is laid over the bridge of the nose, the ends going straight back to a point inside the inner corners of the eyes. Other pieces are then laid over the nose strip, each overlapping the other, the

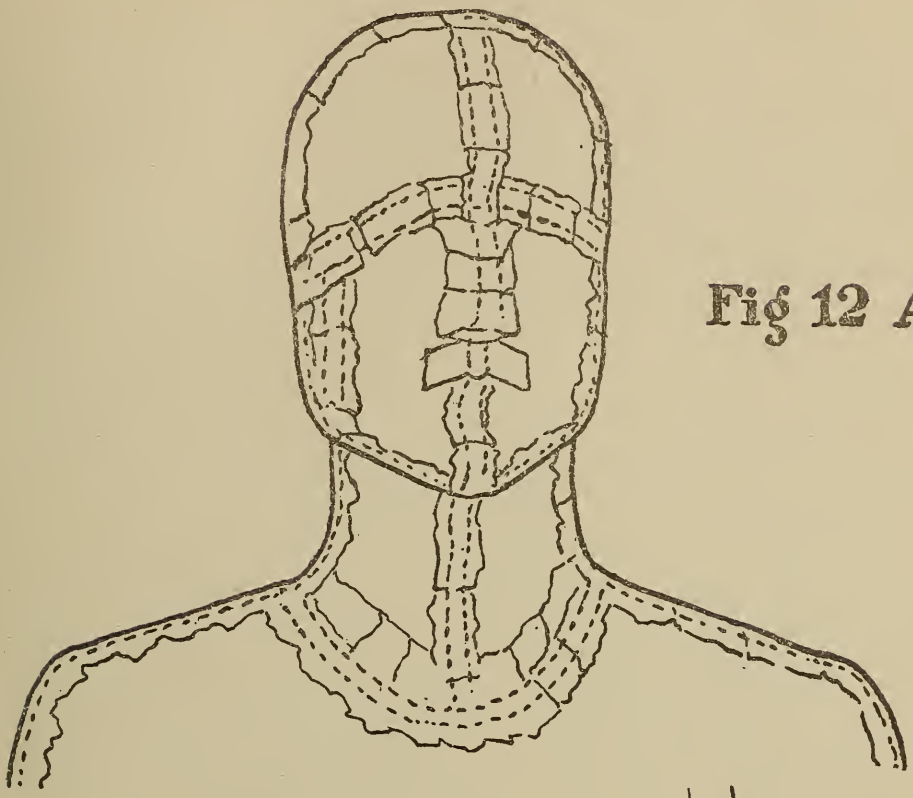


Fig 12 A.

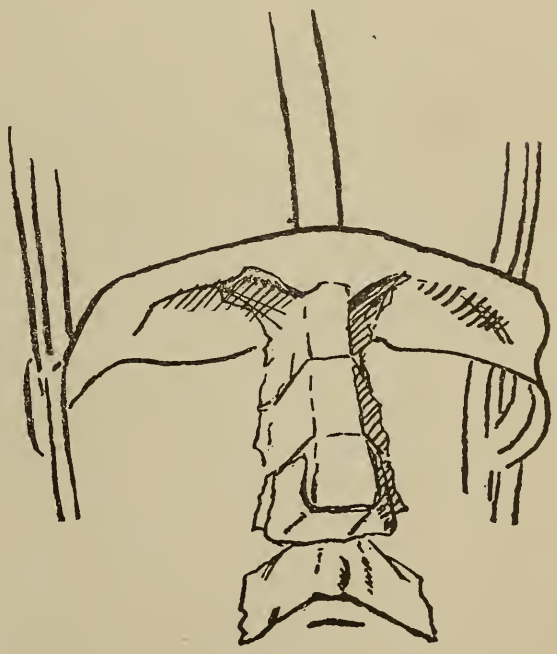


Fig 12 B.

ends suspended in the air. A piece is then placed on the bottom of the nose strip and the ends are curved up around the paper just above it to form the wings of the nostrils. The skin-covered upper lip is formed with a rather stiff piece of pläste papier, about 2½ inches long, which runs backward on each side as it leaves the aluminum strip. Note that the aluminum strip at this point outlines the upper lip, as in laughter, being compressed against the gum and raised up, exposing the teeth. So if the mouth is to be closed in your subject, it should be built out and also brought down to cover the teeth.

In covering the aluminum strips as shown in figure 12A, note carefully the direction of the lines of these strips across their narrow dimension, as this will indicate the lines to follow between the strips. See that the paper is a continuation of these curves. There should be an unbroken flow of lines throughout your entire work.

In bridging all gaps, use triangular shaped pieces of paper, so that there will be no corner suspended in the air that is not taut and secured, as in figure 12D. It will be seen that in figure 12E, the three corners of the triangular piece are all secured over the metal strips, and there is no corner that can sag down. Build the neck up from the neck band, and not down from the jaw pieces, as the horizontal planes under the jaw should be formed last.

Cover the frame completely with one layer of pläste- papier before laying on more to form the features. Do not attempt to secure any finished lines in the first layer, but let every plane be lower than

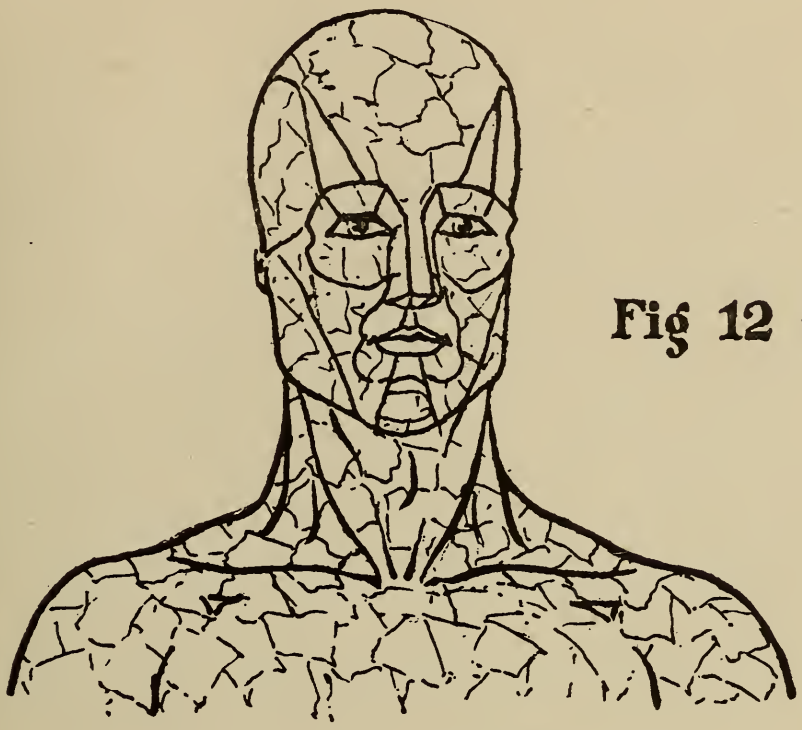


Fig 12 C.

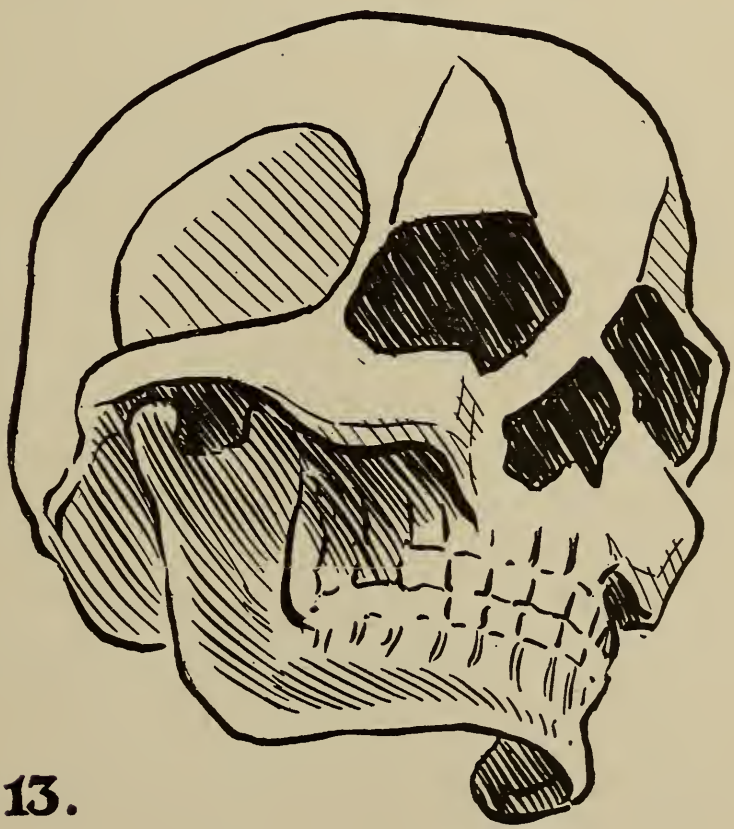


Fig 13.

normal and then build it up gradually. Get the big planes right first, before producing the delicate curves. But do not have sharp angles and corners between the planes. Study carefully figures 12C and 16, and see that each piece you apply runs in the correct directions, in conformance with planes shown in these figures. Do not finish up one part before touching another; work a bit on the face, then let it stiffen while you are working on the head, then go to the neck, then back to the face, and so on. Particularly, do not finish up one side of the face before touching the other; let them grow apace or you will lose unity.

The ears are formed separately and then attached to the head. Take a piece of cardboard folded in half, one of the halves being of the same size and shape as the ear, and the other half for the purpose of lying flat against the side of the head to hold the ear when affixed. Put a wad of dry paper between the two halves of cardboard near the crease, the size of the wad determining how far the ear will stick out. See figure 12F. Then keeping the cardboard at the desired angle, place pläste papier over the wad and the cardboard to hold it in proper position. Then attach to the side of the head in the proper place as explained in lesson on construction of the ear. The little projecting lug on the side vertical strip marks the point where the upper rear part of ear is attached to the head. Then model the round rim around the ear and form all the outer curves and planes. Allow to dry and harden, and then cut out with a knife the orifice of the ear, covering over with pläste papier to form the correct lines.

Fig 12 D.

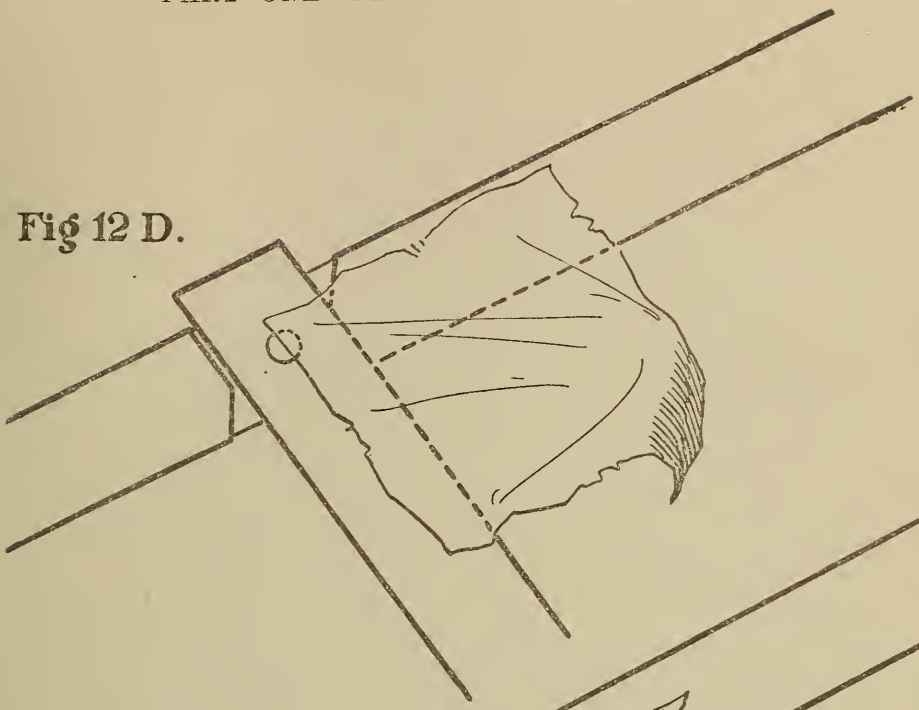
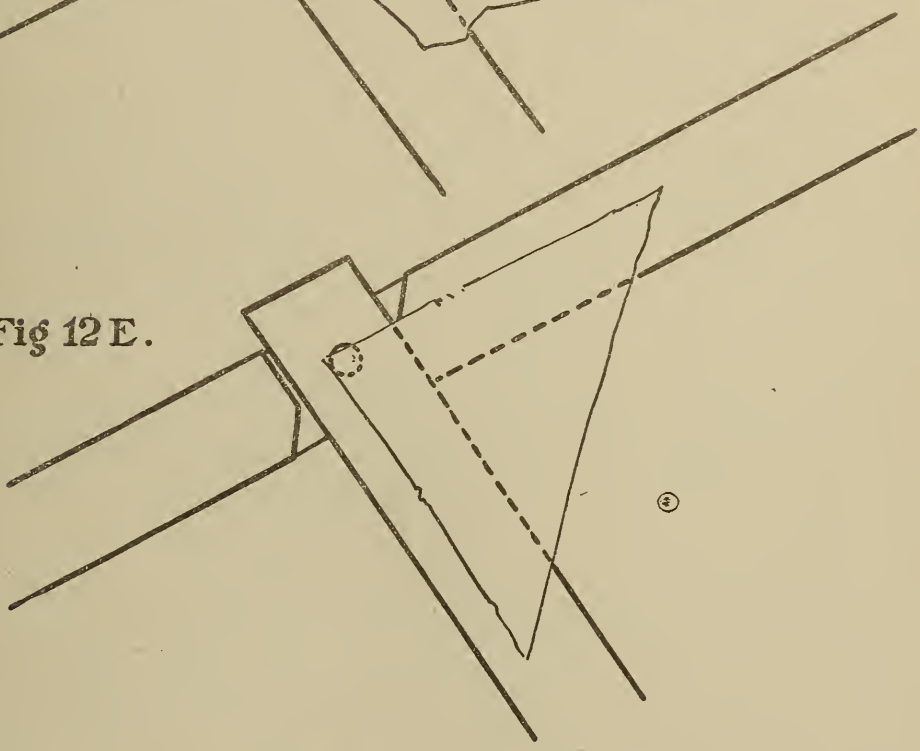


Fig 12 E.



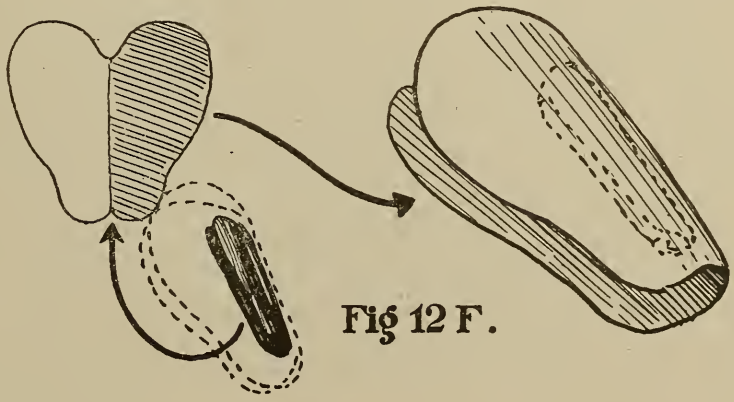


Fig 12 F.

As one learns to handle it, pläste papier will prove very plastic and amenable to the touch. But one must learn from experiments of his own rather than any written description. After being laid over the Superskill the pläste papier can be pressed in and out like clay, to change its formation, if done before it hardens and sets. So if a certain place on the bust were too high, instead of taking off any layers of the pläste papier, it may be pressed gently in, and each litle piece of paper will slide over into its new position, without causing a bulge elsewhere.

If a surface is to be built out considerably, instead of laying layer after layer of pläste papier over this spot, simply place a dry wad of paper of the desired form and thickness over the place to be built out, and then cover that with one piece of the pläste papier.

As it is easy enough to build out with pläste papier, the Superskill strips describe features as low and narrow as is consistent with correct lines. For instance the jaw strips outline a very narrow, but normal, feminine jaw, and if a heavy wide masculine jaw is required, it can be built out. However, if there is an abnormal feature, such as, for instance, a receding chin, the modeled chin can be easily cut down with a knife after the pläste papier has hardened and the Superskill strips have been removed from the shell, and then covered with fresh pläste papier to form the desired receding lines of the chin. Pläste papier heads can be patched up at any time without showing patches and scars, being entirely made up of patches of paper anyhow.

If due to unusual atmospheric conditions, any

part should sag down, just build it up to normal again by adding layers of pläste papier; if it bulges out above normal, merely trim down with a knife and cover over again with pläste papier.

A quick method of modeling, after one learns to handle the pläste papier skillfully, is to cover an entire space between strips with small pieces of pläste papier loosely without any thought of form or planes. Then press the pläste papier in and out, like clay, to secure the proper formation.

This should be done by putting one of your hands inside the frame and pressing out with the fingers, resisting on the outside with the fingers of the other hand. See that there are no loose edges, by pressing together firmly each piece of pläste papier. Of course, all this must be done before it hardens. Work only on one section at a time, and start on the face first, so that it will be easy to put the hand inside the framework, before it is entirely covered over.

This lesson on handling pläste papier is of greatest importance to the beginner as it will add skill to untrained hands; and so every statement made herein should be carefully studied, and remembered while modeling.

LESSON 3—PROPORTION

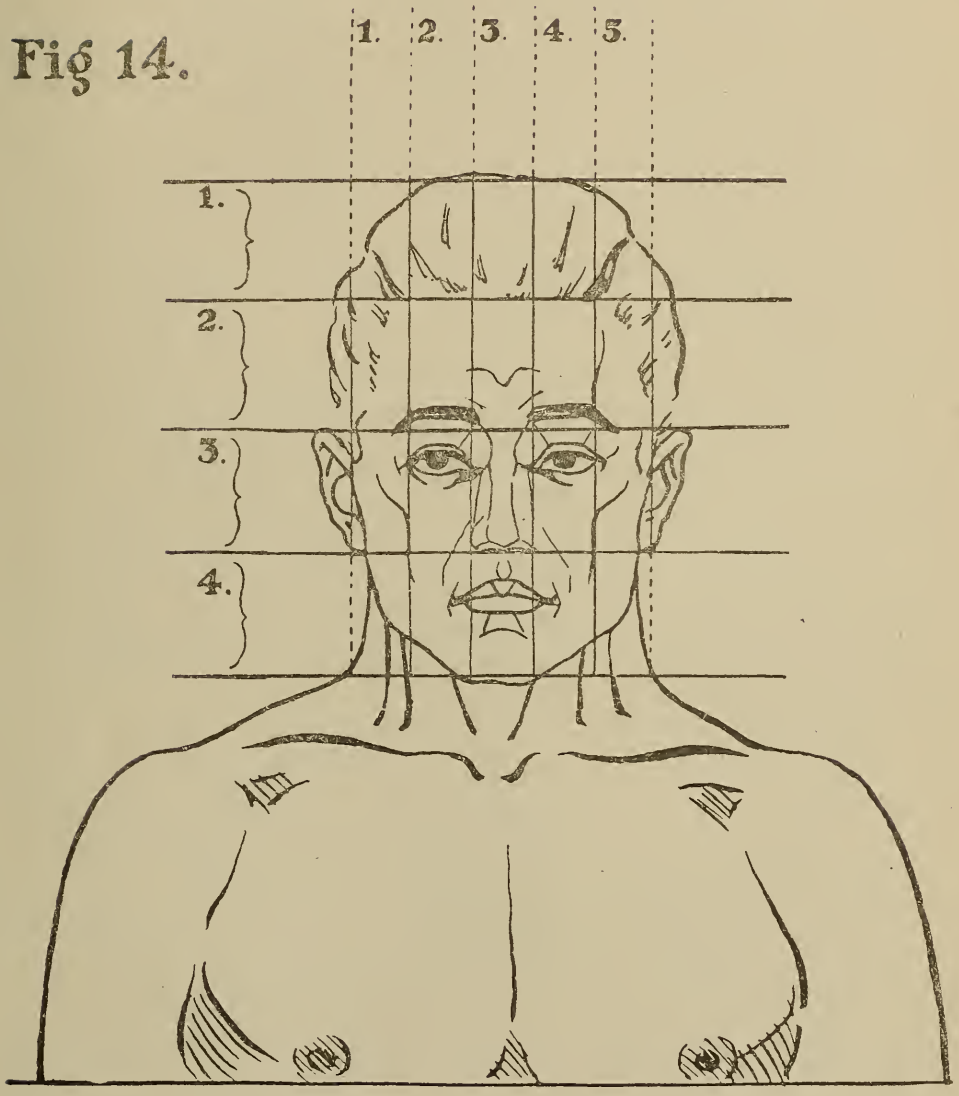
"I cannot imagine beauty without proportion," says Winkelmann, "Which is always its foundation." The Superskill ably secures the proper proportions for even the unskilled modeler; nevertheless it is well to become familiar with the following measurements. The human body is designed with geometrical accuracy; each part is related to the other; nearly all units are of the same size or can be evenly divided into each other.

The head can be divided into four equal parts: 1. From the top of the head to the beginning of the hair. 2. From the edge of the hair to the root of the nose. 3. From the root of the nose to its base. 4. From the base of the nose to the chin. No. 4 is divided again as follows:—1/3 from nose to mouth; 2/3's from mouth to bottom of chin. These measurements refer to the straight up and down distance between the horizontal lines running thru these 4 points, and does not include the distances forward. (See Figure 14).

A horizontal line drawn through the outer corner of the eye will divide the head, from crown to chin, exactly in half. The height of the head (distance from the horizontal line even with the top of the crown to that even with the bottom of the chin), is a unit of measurement commonly used by sculptors. It measures from 8½ to 9 inches. A six foot man is eight heads tall. The space from the chin to the nipples of the breast measures a head exactly.

The breadth of the head across the eyes measures 5 eyes' length. The space between the eyes is exactly one eye's length. The distance from the

Fig 14.



outer corner of the eye to a line even with the farther-most side of the head also equals the length of an eye. This measurement does not include distance backward to the side of the head but refers only to the distance to the left and the right, as seen in perspective. (See Figure 14).

These distances are equal .1. From the eyebrow to the bottom of the chin; 2. from ear to ear (measuring through the head); 3. from the hollow of the ear to the point of the nose.

Measurements vary in the human body but the proportions never do. For example, from ear to ear the distance may be 5½ inches in one head and six inches in another, but so also will the distance from eyebrow to chin, be 5½ inches in one head and 6 inches in the latter. Hence, using parts of body as measurements are more accurate than the use of the rule. That is why the Superskill can be used for modeling any head; the proportions it outlines is the same in everyone.

The head has somewhat the form of an egg; when viewed from the side, the small end being at the point of the chin. The face also from the front view has the same oval shape. The widest part of the head is just above and behind the ears and is outlined by the side vertical strip of the Superskill. The longest part of the head is on the level with the eyebrows.

Internally, the left side of the body is the exact counterpart of the right side. Therefore when the action or position of a certain muscle or feature is explained it refers to both sides. Externally, the face can vary very slightly as one side might be

more relaxed at that particular moment. However, the head must be symmetrical and balanced, as a slight deviation will produce a deformity. The left side must, therefore, be a close duplicate of the right, differing only in that the lines run in just the opposite directions. It is this difference that makes it difficult for the novice to compare the two accurately. This can be overcome, however, by placing a mirror on one side of the work, and a reflection therein will reverse the lines. It is then very easy to compare the two sides and to make the necessary corrections.

LESSON 4—CONSTRUCTION AND PLANES

A plane is a flat surface in which a straight line connecting any two points in it would lie entirely on that surface. A cube for instance has 6 equal planes. In like manner the face has a great number of planes, but they are hard to distinguish for instead of being at sharp right angles to each other like the cube, they are connected by delicate curves. They exist nevertheless and must be taken into consideration, or character and expression and construction would be lacking in your work.

First study the diagram (Figure 16) closely and then carefully compare with a face to discover the planes marked out therein. Each plane must be there and yet care must be taken that in going from one plane to another there are no sharp angles. Give greatest thought to these planes when putting on first layer of the Pläste-Papier. As you put on each piece, consider whether it is forming the right plane in that region; whether its lines are running in the correct general direction.

These planes are more pronounced in a man than in the rounded face of a woman or child. The average woman's face has softer lines and smaller features, lower forehead, more ovoid and less square brow and jaw, more pointed and more receding chin, fuller lips, more prominent and rounded cheekbones. She also has a smaller head than a man, particularly in the back upper region. The foreheads vary according to the development of the brain underneath.

Bear these characteristics of a women's face ever in mind when modeling a female bust, as the

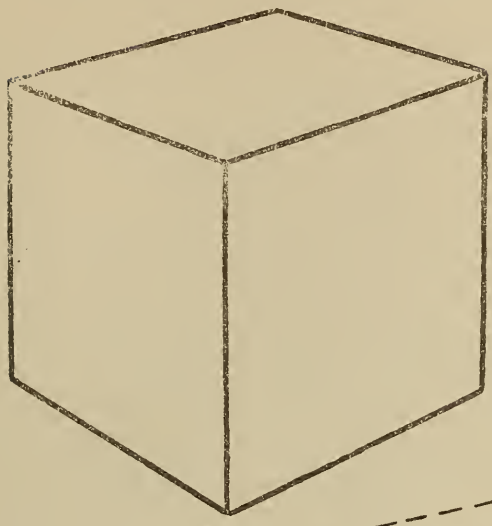


Fig 15.

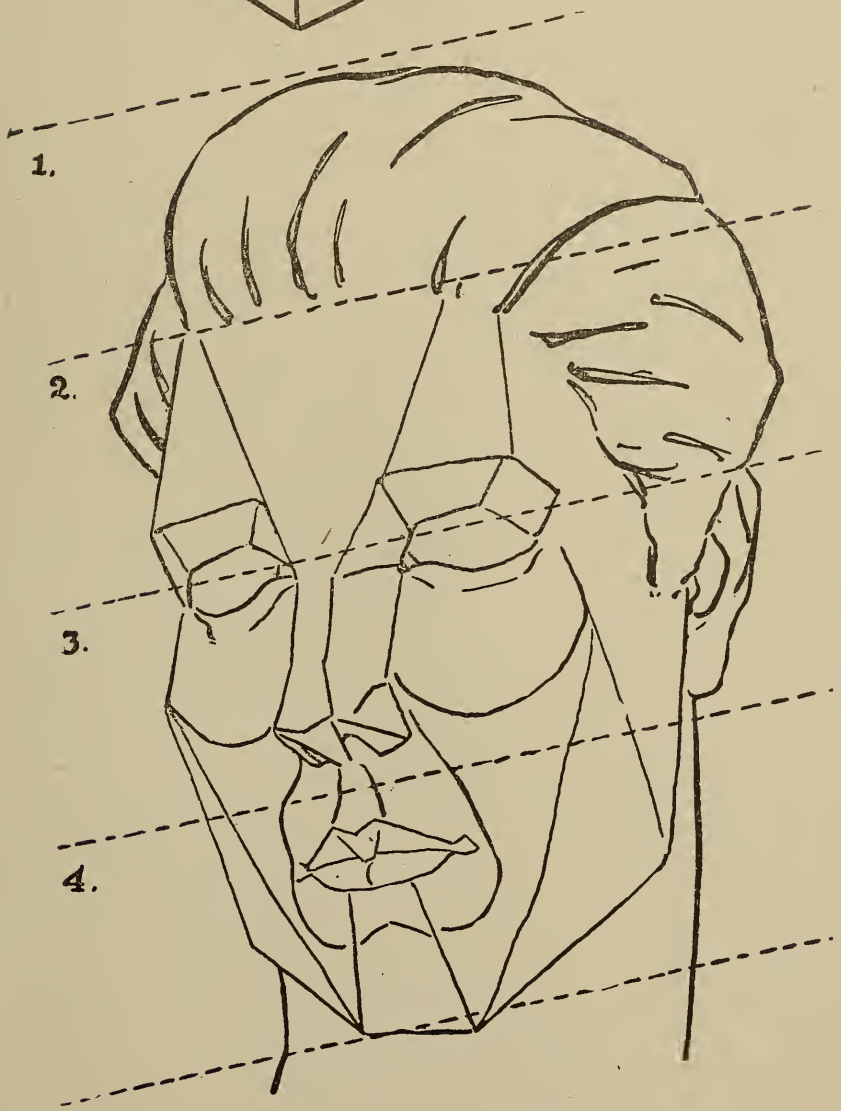


Fig 16.

tendency in modeling is always to form the more rugged angular masculine face.

Construction. There are two methods of reproducing the features and the planes of the head in your work;—the wrong way and the correct way.

The incorrect and inaccurate method appears to be easiest, but really is the most difficult way to get correct results. It is the tendency to produce everything line for line as you go along, without studying the construction. For instance, you are modeling the face; you look at the left corner of the mouth of your model or bust, observe the line it follows and then try to copy it with the pläste papier. As you model you keep your eye one moment on the model and the next on the head you are modeling, to see that your lines are going in the correct direction. You are merely working with surface lines—and trust to your eyes to make a close copy. You fail to consider that there are three dimensions. This is fundamentally and radically wrong.

The correct, interesting way is to study the underlying construction. If you were to model a perfectly round ball, you would not have to study and copy the curves of a ball as you model, because you know its construction and shape. It would be easy enough to produce a sphere out of your fund of knowledge. Just so should you be familiar with the construction of the human head. In studying the construction of anything, you must divide it into the smallest units. You would not study the head in its entirety, nor the face, nor even the entire mouth. You would mentally divide the mouth into four parts, the upper skin-covered part, the upper red lip, the

lower red lip and the lower skin-covered portion, and study the construction of each part separately.

In studying the construction of the lower red lip, for example, you would study it as a mass, not as two lines. You would further divide this lower lip into three parts; the center, a rectangle, would run almost straight to the left and the right; and the two sides, triangular in shape, which run backward, reducing in width, to the corners of the mouth. With this knowledge, you will build up your lower lip as a whole, and not line by line.

LESSON 5—COLOR

In modeling or sculpture, expression is obtained by form, usually without the aid of color. In such cases the color values are obtained not by paint, but by high lights and shadows and half shades secured by hollows, depressions and high spots in the form. This, of course, is most difficult to obtain and should not be attempted by the student in his earlier work. In modeling, your work should be placed in the same light as the model and the strongest light should come from the side.

It is very fascinating and interesting work, however to paint these heads in the natural colors. The pläste papier offers an ideal surface that will take water colors very nicely.

All colors can be secured by various mixtures of the three primary colors:—**Red, Blue** and **Yellow.** When only two of these primaries are mixed to obtain a certain color, the other primary that is not used is called the complement of that mixture. Thus yellow would be a complement of purple which is a mixture of the other two primaries, blue and red. If this purple were too strong and intense for the purpose desired, it can be grayed, or reduced, by adding a little of the complement, yellow.

An equal mixture of all 3 primaries will produce brown; a mixture of all three, with more of the blue and less of the yellow, produces black. To secure paler hues of any color, white is added. The following table shows how to obtain the various shades, and what the complement to that shade is:

Colors Mixed	Color Obtained	Complementary
Red-Yellow	Orange	Blue
Red-Blue	Purple	Yellow
Yellow-Blue	Green	Red
Yellow only	Yellow	Purple
Red only	Red	Green
Blue only	Blue	Orange
Orange-Blue	Brown	None
Purple-Yellow	Brown	None
Green-Red	Brown	None

Endless variations can be secured by varying the proportions of the above colors. If for instance a reddish orange is desired, more of the red is used than the yellow. Because of the difficulty amateurs experience in securing a good natural flesh color by mixing the primaries, a flesh tint has been prepared and has been included in the Superskill Paint Box. The entire shell should be covered with this flesh tint, after it has been greatly weakened and reduced by the addition of white first, and then the pink cheeks, the ear tips and the nose tip should be touched up with a red, which has first been greatly weakened by the addition of white. The colors should be mixed on a palette, a board or a cardboard before being applied.

LESSON 6—CONSTRUCTION OF THE EYES

Eyes. The eye sockets should be sunk deep under the brows with the protruding cheek bones standing out below the outer edge of the eye. The beginner seldom makes these sockets deep enough, with the result that the face appears flat. While the visible part is oval like an almond, the eyeball really is round like a ball, and is 1 inch in diameter.

The eyes should be an eyes length apart; that is, the distance between the inner corners of the eyes is equal to the distance from the inner to the outer corners of each eye. It is particularly important that the corners of the eyes be in a correct position. If too deep, the nose stands out too much. If too low on the face, the nose will appear too short. If eyes are placed too far apart, they will make nose appear too wide at the root and make the face too wide. (See Figure 32).

The inner corners are slightly lower than the outer, in practically all eyes. (See Figure 32). In Orientals, the inner corners are much lower, which is further accentuated by a fold of skin hanging from the upper eyelid over the inner corner of the eye. It is these oblique eyes, more than anything else that give the Chinese and the Japs their characteristic appearance.

The eyeball is fixed; and though it rolls in all directions it cannot move out of its sockets. So when in certain expressions the inner or outer corners appear raised more than normally it is due to the changed formation of the skin in that region, and also to the position of the eyebrows, which are very mobile.

Fig 27.

Fig 28.

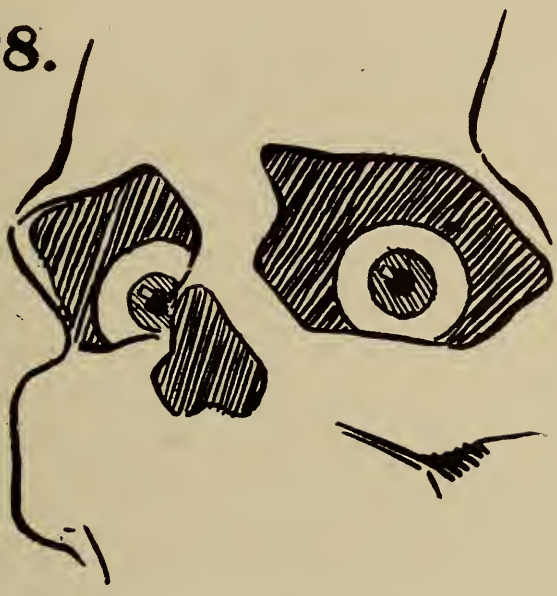
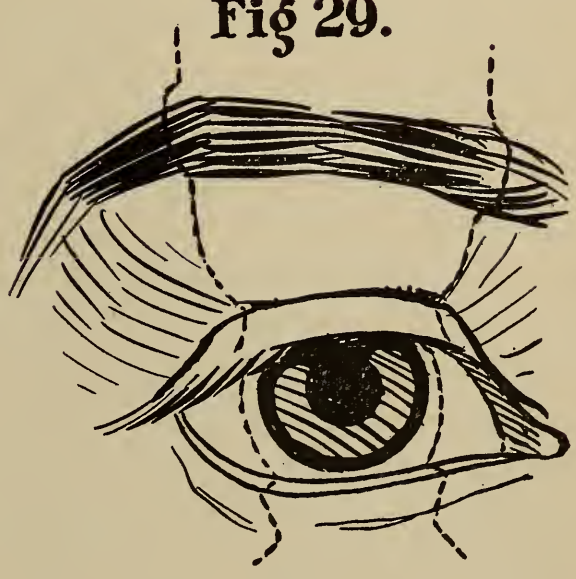


Fig 29.



The top and bottom part of the colored iris, when eye is looking straight ahead, is covered by the lids. When down-cast the eyeball rolls downward and exposes white between the iris and the upper lid. In upturned eyes, the white shows beneath the iris.

In modeling without the aid of color, the black spot of the iris, called the pupil, is produced by indenting a hole at this point, to create a dark shadow. Take care that it is in the same position on both eyes, so that both eyes are looking in the same direction.

The pupil is the most projecting part of the eye ball; hence directly above it, the lid is raised the highest and most forward. As this black spot moves from side to side, depending upon the direction of the gaze, the upper lid will change its curve to conform. In looking to the left, the black spot will be near the left corner of the eyes, and so the edge of the lid will be sharply curved above this point and the remainder of the edge will have almost one straight sweep.

The outer corners are sharp and angular, and are formed by the upper lid lapping over the lower. The inner corners are more rounded, with the appearance of being punched out.

The upper lid is more prominent, movable and longer than the lower, and is used to shut the eye without the aid of the lower lid. The upper lid is also much more curved than the lower. The more widely open the eyes, the greater the curve of the edges of the lids.

"The eyebrows," says Shakespeare, "Is the rainbow of peace or the bended bow of discord." It is full

Fig 30.

Fig 31.

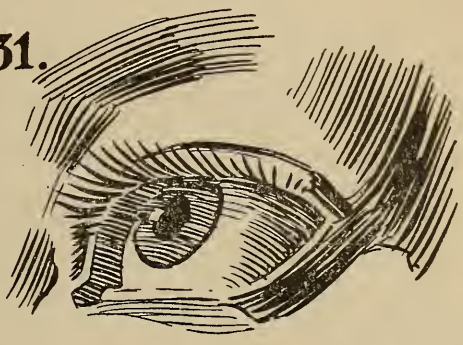


Fig 32.

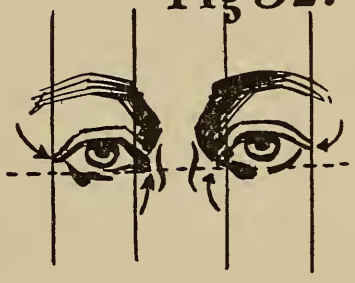


Fig 33.

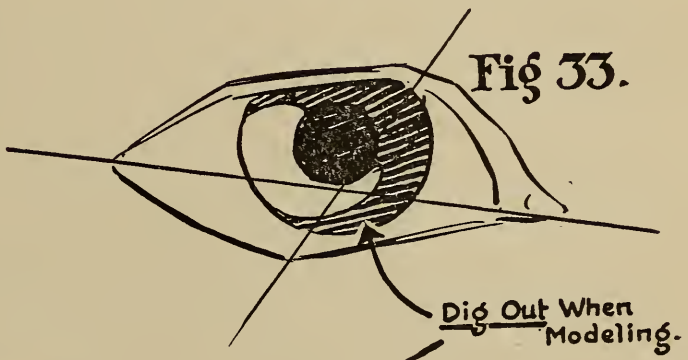


Fig 34

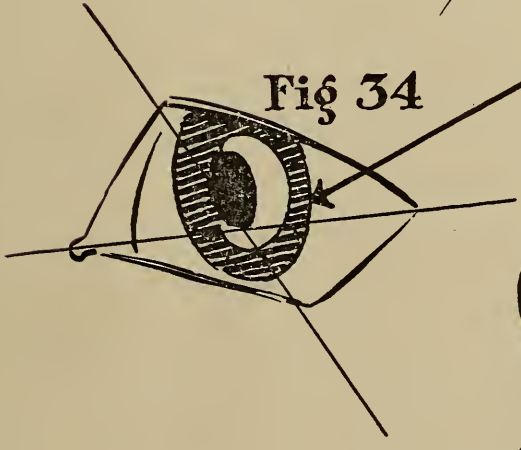


Fig 35.

of expression and can indicate almost any emotion of the human mind. Eyebrows vary in size and shape greatly, some are flat, some project far over the eyes, some are long and some narrow. But always the eyebrow is larger at the outer end than near the nose. The hairs of the eyebrows run upward and outward. Over-hanging eyebrows make the eyes appear very deep set, when they may not really be so. Large eyes and a small mouth are the attributes of beauty.

The eyes have voluntary muscles that close and open them when awake, and involuntary muscles that close and open when asleep or unconscious. It is this condition that produces the peculiar heavy, squinting eyes of a drunken man. In his stupor, the involuntary muscles are closing his eyes, while in his semi-consciousness his voluntary muscles are trying to raise them up, which arches the eyebrows and half opens the eyes. It is this squinting, half-open gaze that makes him see double. The lower part of his face hangs loose and limp, while the corners of his mouth droops down. The skin under the eyes is loose and puffy, and the lower eyelid is drawn down away from the eyeball, exposing the inner red membrane of the lid.

Fig 38.

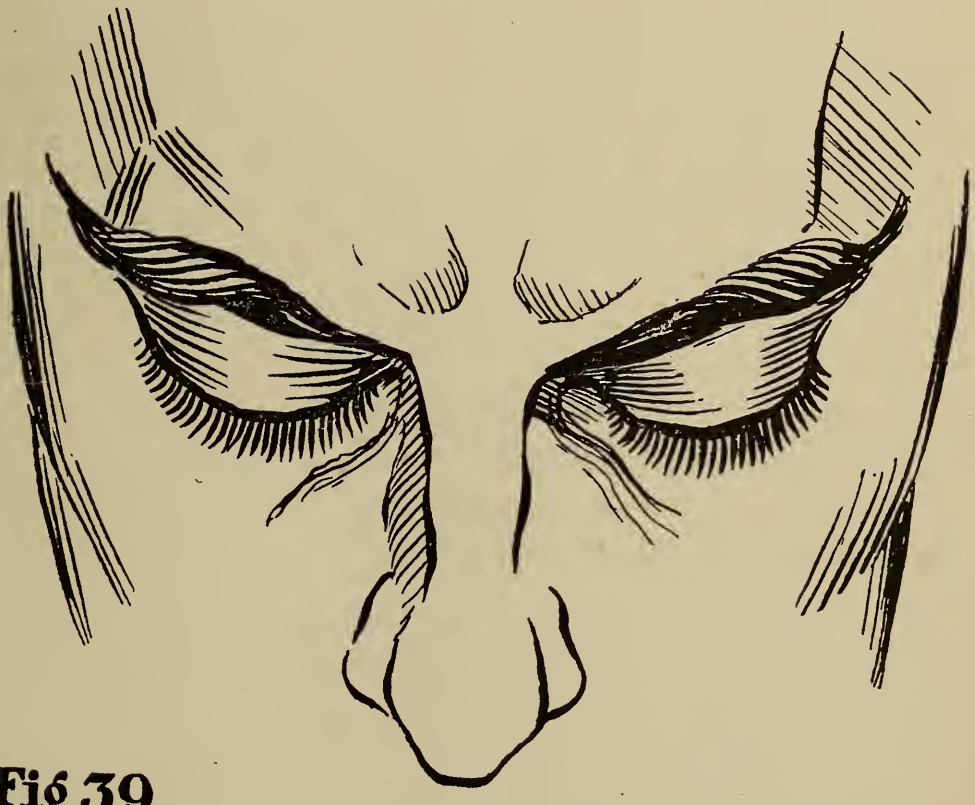


Fig 39.

Figure 38 shows eyes as viewed from below
Figure 39 shows eyes as viewed from above

LESSON 7—CONSTRUCTION OF THE MOUTH

Mouth. Normally the lips are full and rounded, the upper projecting out beyond the lower. (See Figures 40 and 41). However, a deep hollow just above the chin adds fullness to the lower lip. There is a great difference between the formation of the upper and lower lip. Lips vary in length; the small lips being the most beautiful; 50% longer than the eye is a good proportion to follow.

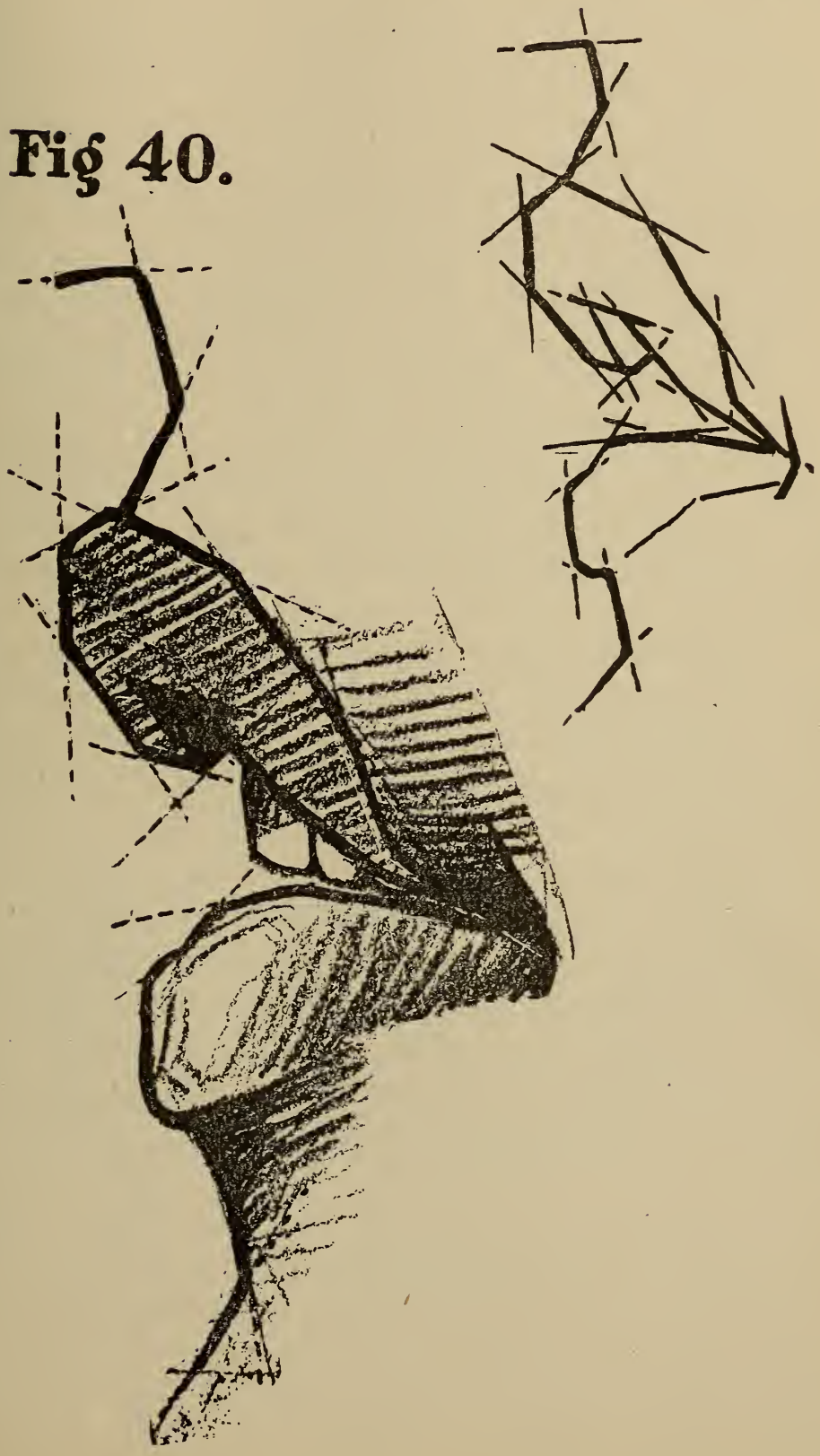
The lips extend from the nose to the chin. In modeling, the red membrane part should be clearly defined from those parts of the lips covered by the regular skin.

Upper Red Lip. At the corners of the mouth, a narrow horizontal line of red follows a short straight line forward, than widens and twists upwards into a rounded vertical plane, which continues upward in a straight sweep toward the center of the mouth, where it curves forward and downward to become the most projecting part of the lips. The upper line of this red mass takes the following course: from the corners, it runs forward; then curves upwards; then a long sweep upward and forward nearly to the center, where it curves sharply downward. The line between the two lips when closed has very slight and gentle curves, and runs almost in a straight line forward from the corners to the center. (See Figures 42 and 43).

Lower Red Lip. The lower red lip can be divided into three planes of almost equal length. The center is a flat rectangular form, curving backward from its center very slightly; and the right and the left triangular forms, which curve back as they

Fig 41.

Fig 40.



run to the corners of the mouth. The lower lip gradually narrows as it goes to the corners. The entire lower lip is nearly all in the same horizontal plane; that is, it curves neither up or down. The lower edge of the lower lip follows an almost uniform curve forward from corner to center, and is almost entirely on the same horizontal line. (See Figures 42 and 43).

Upper Skin-Covered Portion. A groove runs down the center of this portion from the septum between the nostrils to the red upper lip.

On each side of this indention are columnar forms, which are the most projecting parts of this portion. From this point, the lip slopes backwards on a straight line to the cheeks on each side. (See Figure 45).

Lower Skin-Covered Portion. Like the red lower lip, this portion too can be divided into three planes; the central which slopes forward, from the hollow above the chin to the red lip; and the two sides which curve backward towards the corners of the mouth.

Great beauty can be added to a face with well formed lips. Said Lavater, an early physiognomist in speaking of the mouth, "I conjure our sculptors, and every artist whose mission it is to represent man. I conjure them with all my might to study the most precious of our organs, in all its varieties, in all its proportions and in all its harmonies."

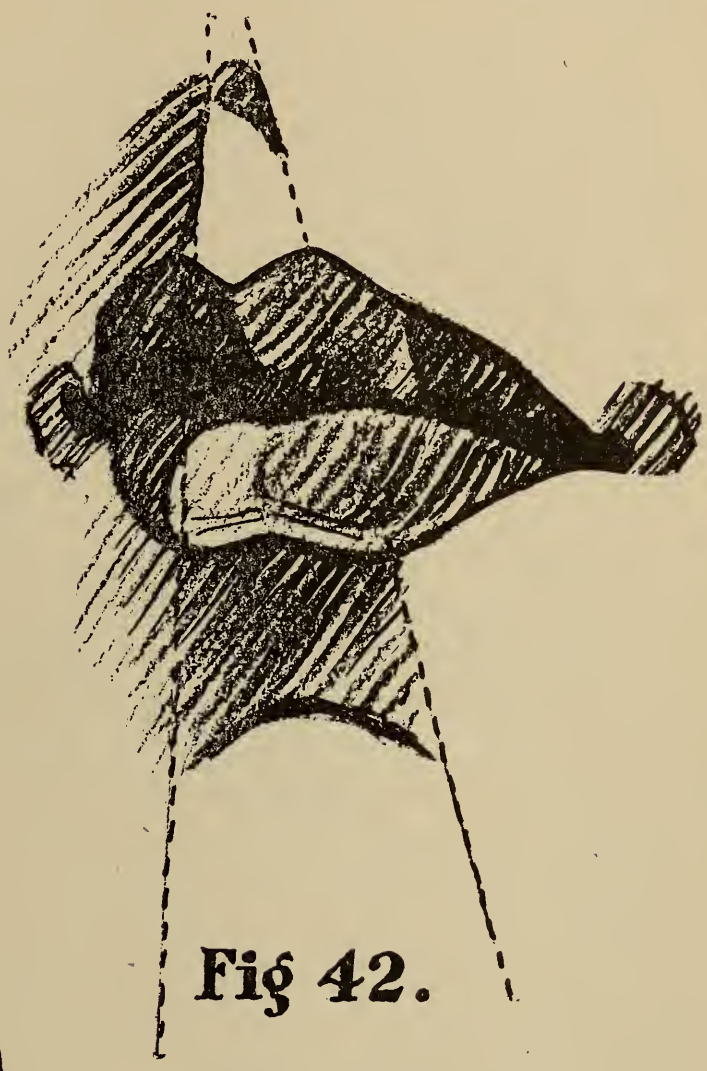


Fig 42.

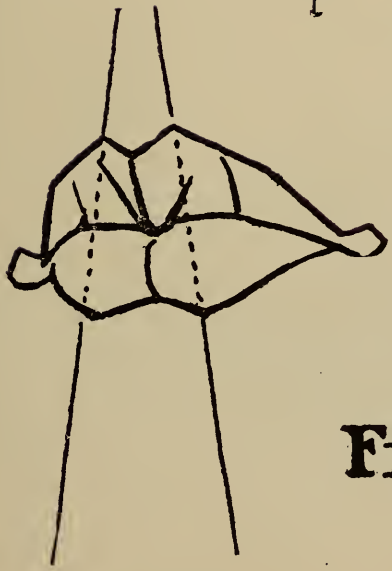


Fig 43.

Fig 45.

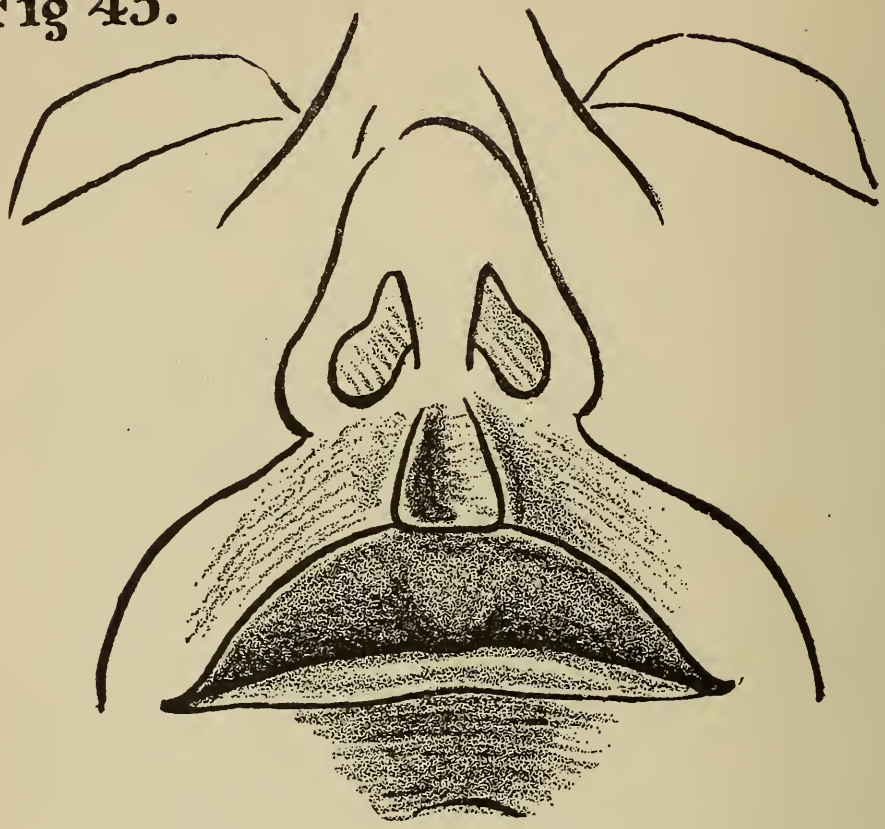
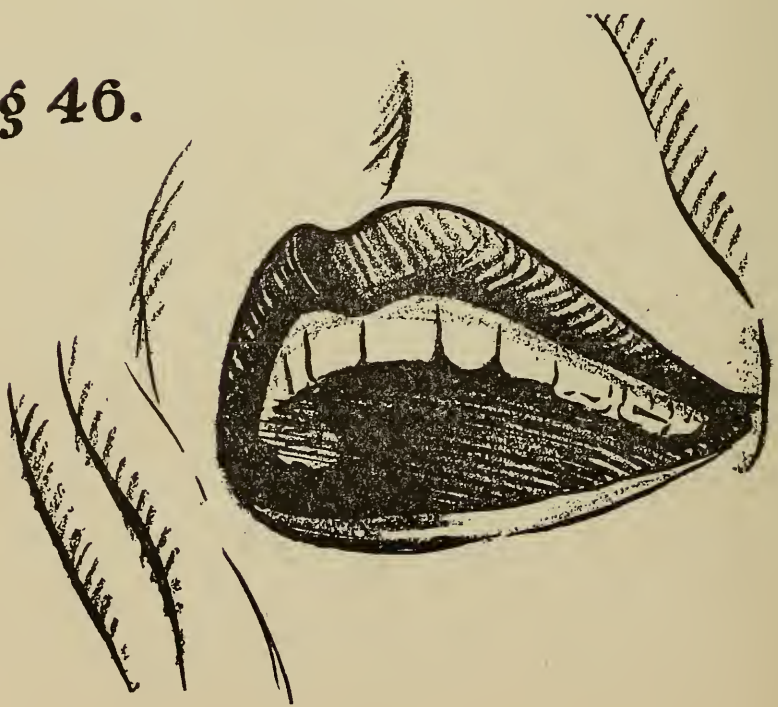


Fig 46.



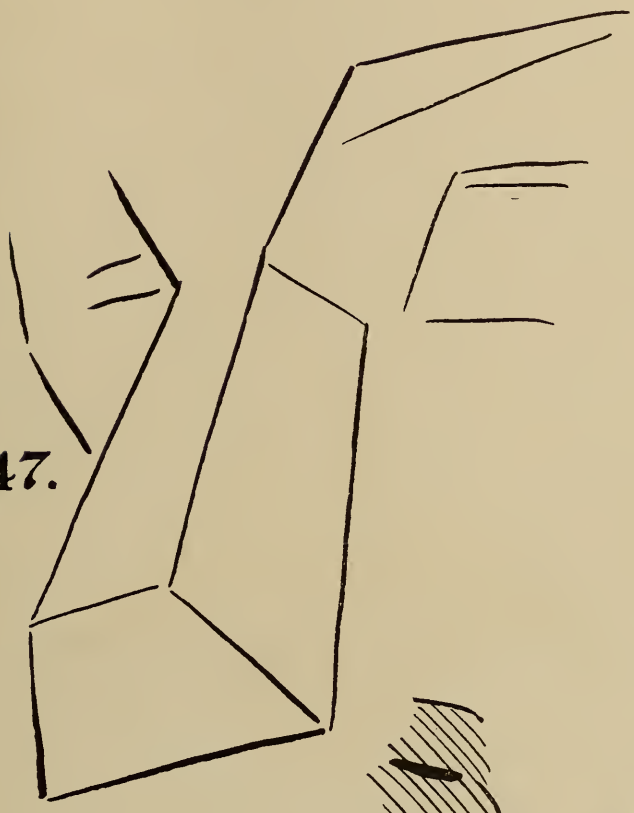


Fig 47.

Fig 48.

LESSON 8—CONSTRUCTION OF THE NOSE

Nose. The nose is most narrow and deepest at its root, between the eyes; this depression, while always present, varies greatly in each individual. The Greek Nose, which is a continuation of the forehead, without any depression (Figure 51), is never seen except in Classical Greek statuary. However that nose is most beautiful that conforms most nearly to the Greek—one straight line downward from the forehead, sloping outward in almost the same direction as the brow. The length of the nose is equal to the height of the forehead. The depth of the lower end (from tip to lip) is about 1/3 of the length of the nose.

The nose (excepting the bottom section) has three large planes, the two sides, which slope in ward and downward and forward, and the flat ridge that lies between them. The dividing lines between this ridge and the two sides run as follows:—It starts with a line from each eyebrow which curves inward and then outward over the boney bridge, then inward again, and then outward, forming at last an oval at the tip of the nose. (See Figure 48). The tip of the nose is always rounded, even in those having sharp noses. There are no sharp corners in the face—only curves.

The nose bulges out on the lower end of each side and it is important to produce these curved alae surrounding the nostrils accurately. (See Figures 48, 50 and 52). Under strong emotions, which causes deeper and quicker breathing, the nostrils dilate, which widens and raises their wings.

Fig 49.

Fig 50.

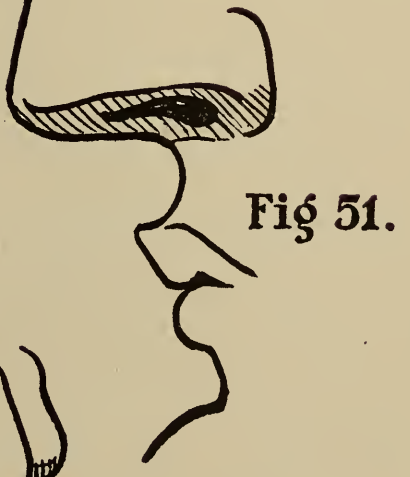


Fig 51.

Fig 52.

LESSON 9—CONSTRUCTION OF THE EARS

Ears. The external visible part of the ear is a transmitter for picking up waves of vibration, which carried to the inner ear, produces audible sound.

Of greatest importance is placing the ear in the proper place on the head. The projection on the side vertical strip of the Superskill marks the point where the upper ear is attached to the head. Bear in mind that the very top of the ear, which is not attached to the side of the head, is higher than this projection.

If care is not taken in this matter the head will appear out of proportion. If placed too low, the upper part of the face and head will appear too long; if placed too far back, the head will appear too thin from a front view; and so on. For the ear is the landmark on the head. The distance from the hollow of the ear to the point of the nose is equal to that from the chin to the eyebrows.

Ears vary in length; however, the bottom boundary never varies; it is always even with the bottom of the nose. The top boundary varies however; but usually is about even with the eyebrows. In most cases the ears slope back in the same direction as the nose, when viewed from the side. (See Figure 53).

Many gentle curves and folds make up the ear, which vary in each individual. They can be more easily studied from life or from the drawings given herein than from any written description. Take care that the hollows are not too deep, as this produces dark shadows. Take care that the ear extends at the proper angle from the head; not too much, nor

Fig 53.

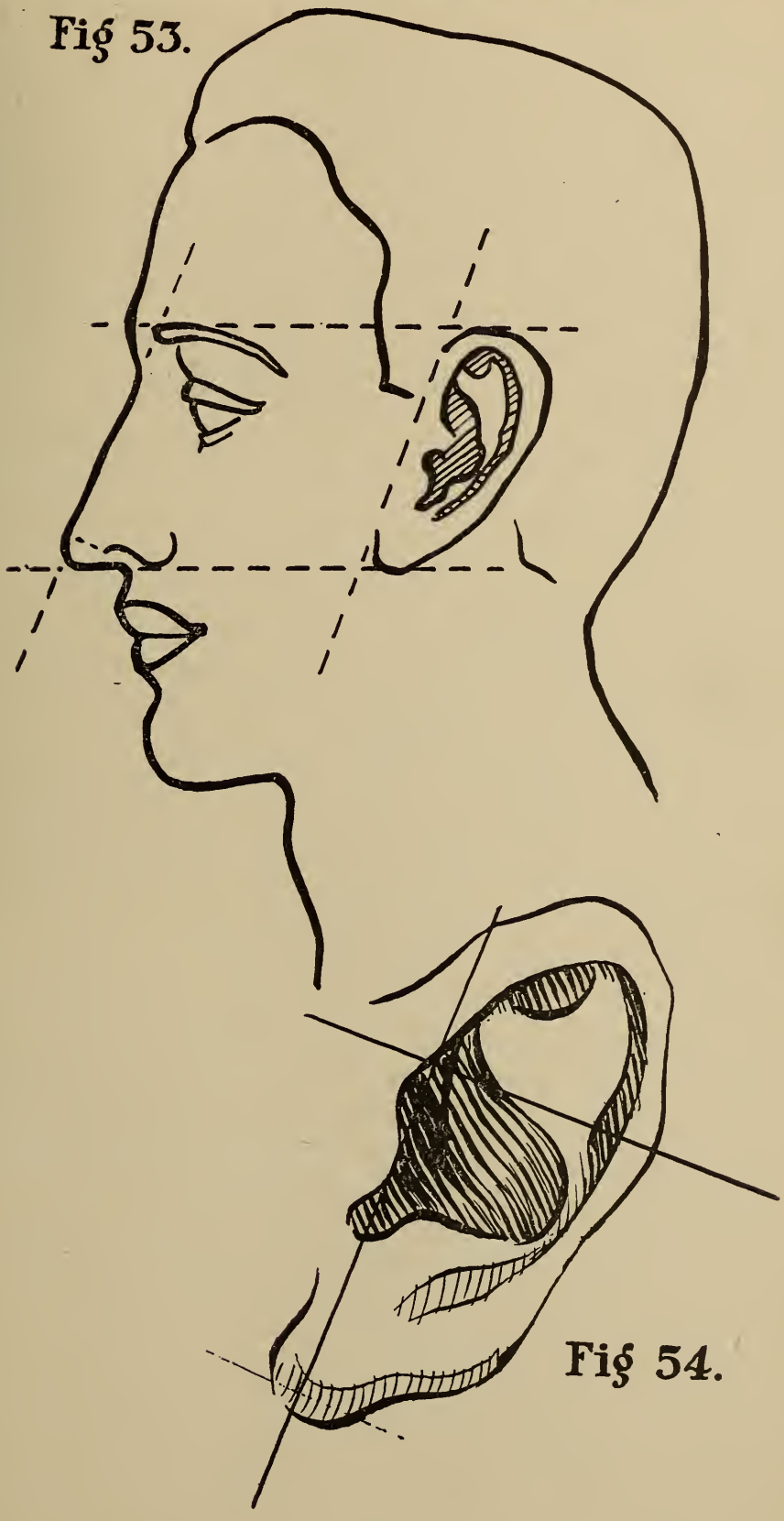


Fig 54.

on the other hand, not flat against the head. (See Figure 56). Except in rare instances, the soft rounded lobe, from which earrings are hung, is not attached to the side of the neck.

There will be a tendency to make the ears too thick, which detracts greatly from their beauty. They should be delicate, thin and shallow. When modeling from a model or cast, study the ears from the rear view and a ¾ view from the back.

Fig 55.

Fig 56.

LESSON 10—CONSTRUCTION OF THE CHEEK

Cheekbone. The form of the face depends in a measure upon the cheek bones which protrude under the outer corner of the eyes. The flat face of the Mongol is due to his deep sunk cheek bones; the wide features of the Australian, (aboriginies) are due to their cheek bones extending so far to each side. The high cheek bones of the Indian is a well known characteristic. When this effect is seen in white people it usually is due to sunken cheeks caused by loss of tissue. The form of the cheek bone should be formed in the pläste papier before the attempt is made to produce the final contours of the face.

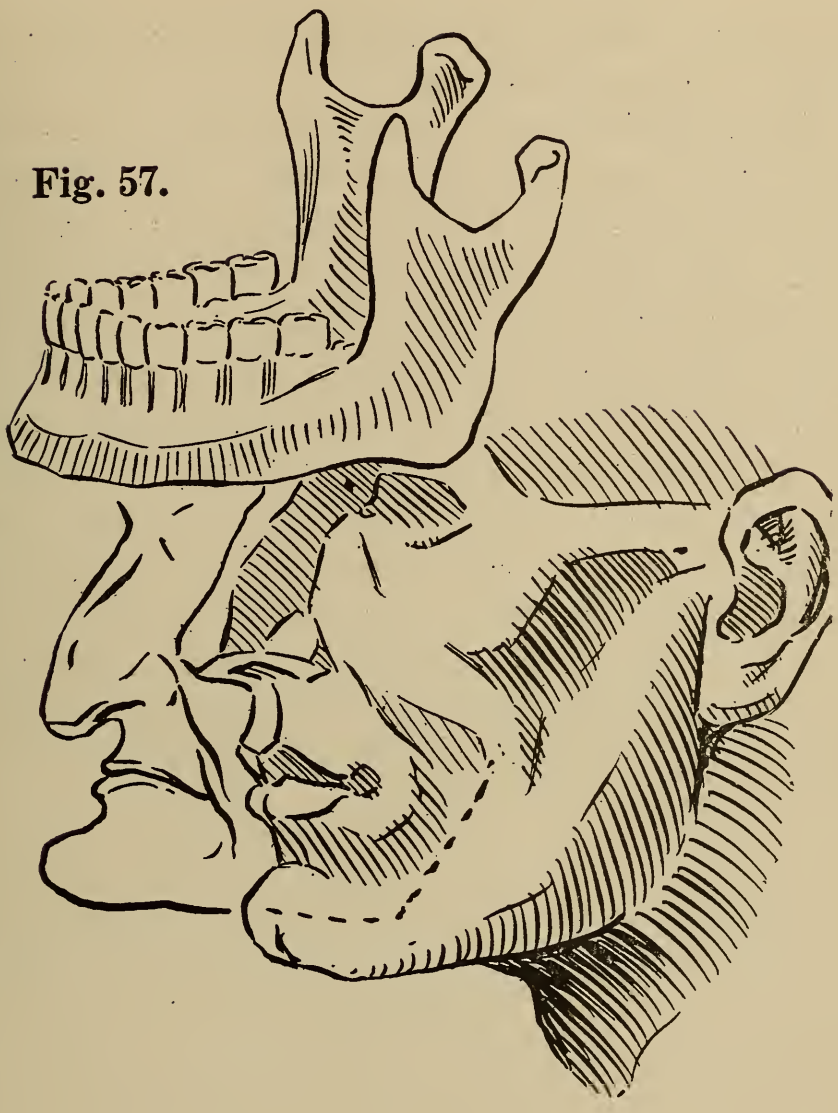
Jaw. The angle of the jaw (near the lobe of the ear) is a trifle over a right angle (90 degrees) in a normal adult, while in an infant or aged person it is a much greater angle, about 130 degrees. The absence of teeth in infants and old folks also alter the lines of the jaw, by raising the chin on a higher plane. (See Figure 57).

A well developed jaw gives strength and forcefulness to a face. However, if it is just 90 degrees and is wide at the angles, it suggests a coarse brute strength. This angle is covered so well with muscles in most people, that there is no marked sharp corner at this point.

The jaw is dropped in laughter, horror, disgust, surprise, awe and other emotions. It is the only large bone in the head that is not rigidly attached to the skull. In the Superskill Device, the upper end of the jaw is attached by means of a pin, which allows it to swing down in varying degrees.

The chin may be square, rounded or pointed;

Fig. 57.



prominent, normal, retreating or double, varying greatly in each individual.

Naso-Labial Fold. This rise in the cheek extends from each side of the nose (just above the wings of the nose) obliquely downward and outward. (See Figure 58). It is more pronounced in some than others and is especially noticable in old people. In smiling or laughing, the crease directly beneath this fold becomes very marked, and extends in a semi-circle around the corners of the mouth. When the corners of the mouth droop in certain sad expressions this curved line under the Naso-labial fold is straightened out. In most cases there is also a furrow marking the top of this fold, starting just below the inner corner of the eye and running downward and outward on the cheek.

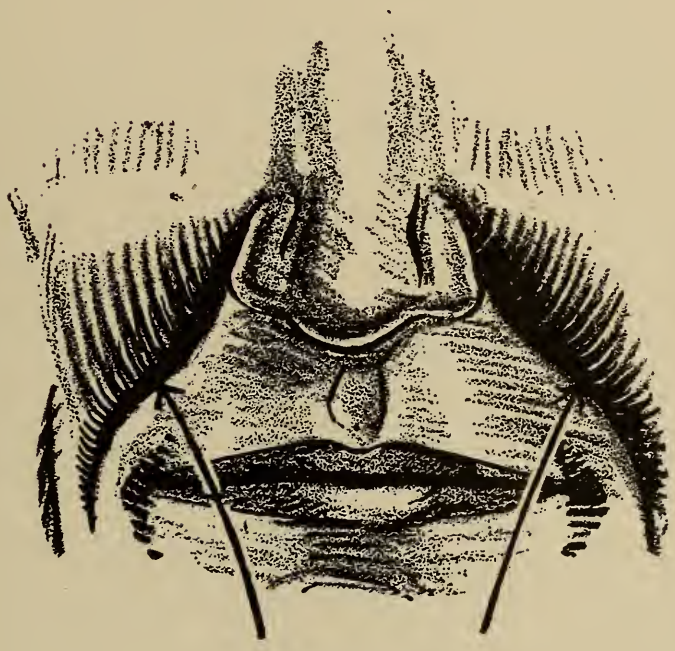


Fig. 58.

LESSON 11—CONSTRUCTION OF THE FOREHEAD AND THE HAIR

Forehead. The most projecting parts of the normal forehead is about 2 inches above each eye, with a slight depression between these two eminences. The greater these two eminences the greater is the intellect beneath them. They must not be confused however with the "bumps" just above the root of the nose, which are air spaces that increase the resonance of the voice.

The low rounded forehead is an element of beauty in the female, while a high forehead denotes intellect. Women of the school marm type improve their attractiveness by allowing their hair to cover part of their high brows. Usually a woman's forehead is lower and more rounded than a man's.

Hair. The Superskill Modeling Device outlines the shape of the skull, and so the hair should be placed above these lines. Lay on the hair with regard to its principle masses rather than attempting minute detail, producing natural waves and curls.

The hair in front should be put on in three masses, one on top around the entire frontal bone, one just back of the temples, and one in front of, and slightly above, the ears. From the crown of the head the waves will radiate in all directions. (See Figures 18, 19, 20 and 21).

Dark hair is produced by deep undercuts, which produce dark shadows. That is, masses project over hollow spaces to produce shadows. In light hair, these undercuts should be shallow and few in number.

Fig 18.

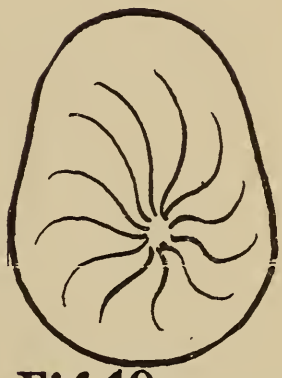


Fig 19.

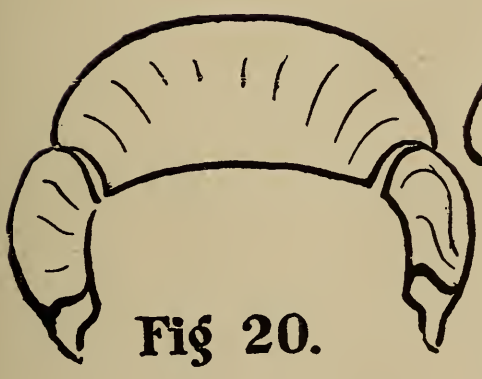


Fig 20.

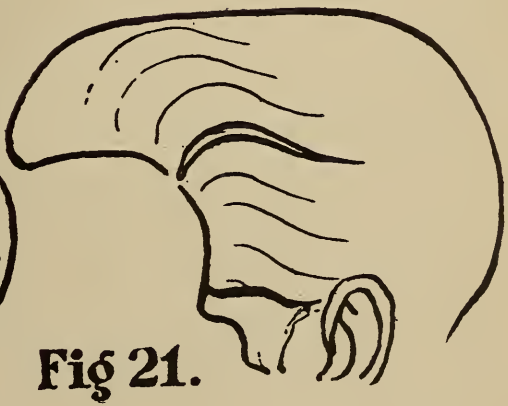


Fig 21.

Hair is paler near the roots, and the masses appear pinker near the face and neck, so if color is employed, in painting these regions, mix a little flesh color with the hair color.

Fig 60.

Fig 61.

LESSON 12—CONSTRUCTION OF THE NECK

The male neck is short, thick and firm, about 5 inches in diameter, rising almost vertically from the the body, whereas the female neck is slender and graceful, and longer and of softer lines than the male, and leaves the trunk in a forward direction. The neck tapers gradually to a smaller circumference as it rises upwards, but has a local swelling in front in the region of the Adams Apple. This swell is more pronounced in man than woman, except in many young woman, in whom this region is so full that it almost suggests a goiter. The back of the neck is flat, with a slight depression in the center, and just below this depression protrudes the seventh vertebrae bone.

The juncture of the neck with the head is higher in back at the skull than in front under the chin. The lower juncture of the neck with the trunk is also proportionately higher in back than in front. Hence the lower and upper boundary lines of the neck run parallel, and as the neck slopes more or less forward, these lines are almost at right angles to the vertical lines of the neck. (See Figure 63).

The two important muscles of the neck, **Sterno-cleido-mastoid,** extend one on each side from the breast bone in the center of the body, obliquely upward and backward to the skull just back of the ears. (See Figures 64 and 65). They stand out prominently in man, but are seen in most women only when a turning of the head in one direction causes the muscles on the opposite side to stand out prominently. When both of these sterno-mastoid

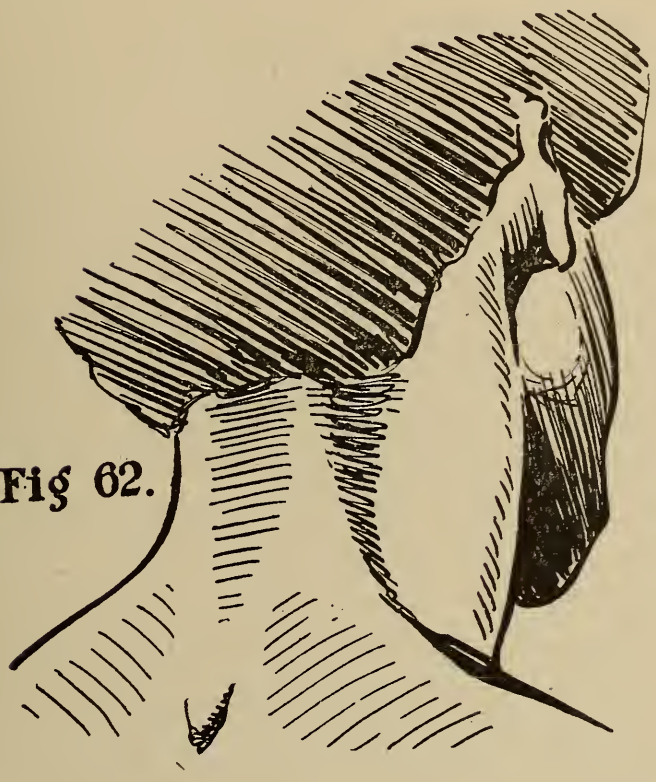


Fig 62.

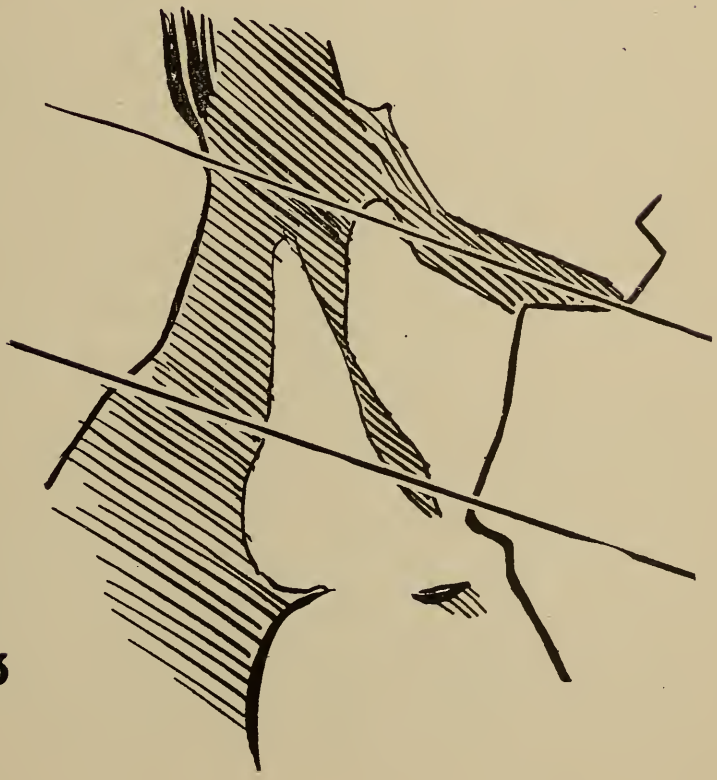


Fig 63

muscles act, the head is bent forward by it: when but one is contracted, the head is turned to the opposite side.

These two muscles form a V-shape, with its base on the breast bone. Just above the point where these muscles are inserted into the breast bone, there is a deep gulley, called the pit of the neck; above that projects the Adams Apple; above this swelling, the line of the neck curves in gently, until it reaches the large horizontal plane under the jaw-bone. (See Figure 66). This plane (which is not outlined in the Superskill, because of the movable jaw) is almost at right angles to the front of the neck when in normal position. When the head is bent back, in looking up, the angle is greater; when the head is bowed down, the angle is smaller. Of course if a double chin develops, the angle disappears.

There is no sharp angle at the joining of the neck to the shoulders. The great **trapezius muscle** which is attached to the base of the skull slopes out gradually from the neck across the top of the shoulder to be inserted into the shoulder blade. (See Figure 67). In woman, this line is almost straight, until it reaches the outer edge of the soft rounded shoulder, but in the more muscular male, there are a number of curves, swells and hollows that must not be overlooked. There is a depression in the otherwise full formation of the side of the neck, forming a triangle with its apex upwards, bounded in front by the sterno-mastoid and behind by the great trapezius muscle.

Fig 64.

Fig 65.

Fig 66.

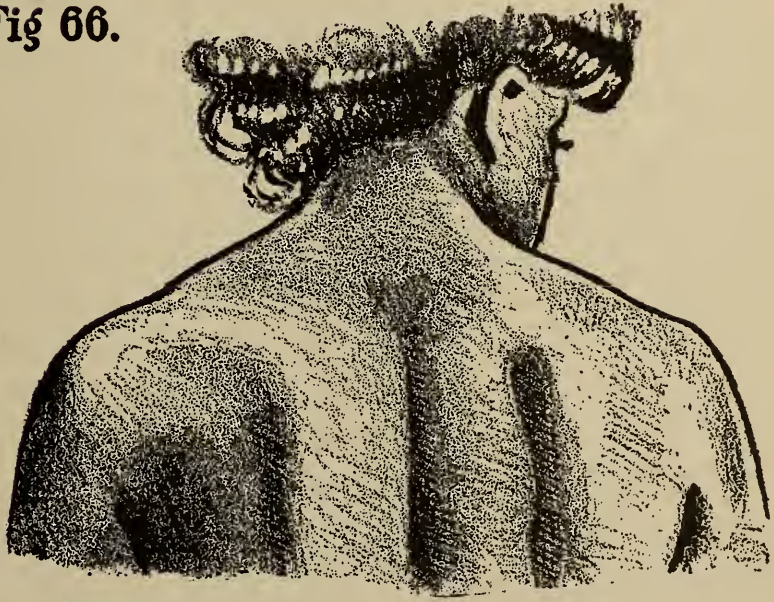


Fig 67.

LESSON 13—THE UPPER TORSO

Shoulder. These are the big important lines of the shoulder. Above the shoulder joint, a rounded, almost ball-like formation, of which the deltoid is the important muscle; the sloping top of the trapezius muscle (disappearing behind the neck, when viewed from the front); the protruding collar bone (clavicle) which runs upward and outward toward the shoulder; and a deep gulley, triangular in shape, surrounded by the collar bone, the trapezius and the base of the neck. See Figure 66). The formation of the shoulders change with each movement of the arms, so the above description applies only when the arms are hanging normally. In men shoulders are square and angular, while in women they are rounded and sloping.

The front of the Clavicle (shoulder bone) is a narrow protruding bone which runs from the breast bone toward the shoulder joint. Note that in leaving the center of the body, it follows a straight line, then curves backward and lastly a trifle forward again, till it reaches the depression just inside the top of the rounded shoulder. (See Figure 68 and 69.) Note also that this bone rises slightly as it goes toward the shoulder. There is a deep depression between the inner ends of the right and the left clavicles, and directly below this pit of the neck is the flat breast bone, about 2 inches wide. This bone slopes down and outward for 2 inches; then there is a sharp angle and it bends inwardly. The entire chest slopes forward as it goes down, upon leaving the clavicles.

Chest. The chest is divided in half by this breast-bone depression. The pectoral muscles form-

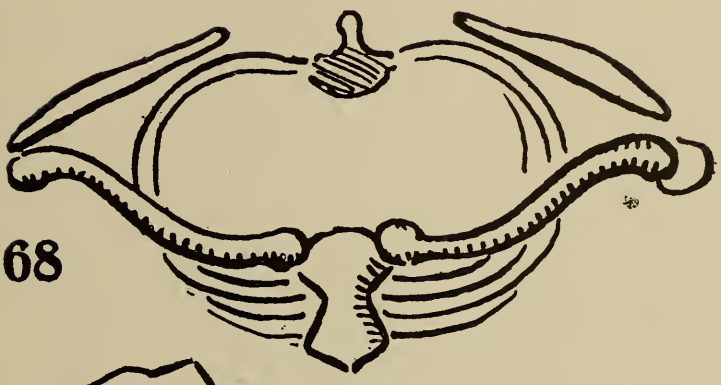


Fig 68

Fig 69

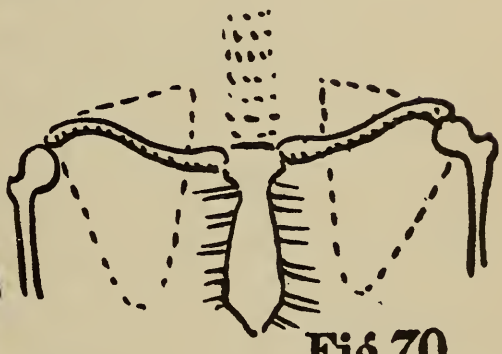


Fig 70

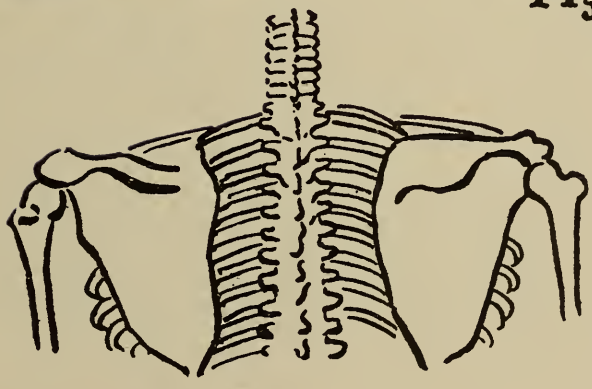


Fig 71.

ing the chest, starting at the breast bone, slopes gradually forward and outward to the nipple and then curves gently inward toward the bottom of the shoulder joint; as it nears the arm pit it curves out again, more pronounced and beautiful in the female than the male.

Breasts. The nipples are about four inches from the center of the body and about nine inches from the chin, on the most raised surface. In the female the nipple is larger and is surmounted on a rounded prominence, called the breast, which varies in size. (See Figure 72). The lower half of the breast has a greater curve than the upper, when in an upright positon. The nipples point outward; that is, away from each other.

Back. The back of the neck and the central portion of the upper back is a flat surface running straight up and down. The shoulder blades in the back, covered by the wide trapezius muscles are also almost vertical, projecting out on each side of the gulley in the center of the back produced by the spinal column. (See Figure 67).

The width of the shoulders is equal to a trifle more than twice the vertical distance from crown to chin in the man, averaging 18 inches; while in a woman it is a trifle less than twice, averaging 17 inches.

Fig 72.

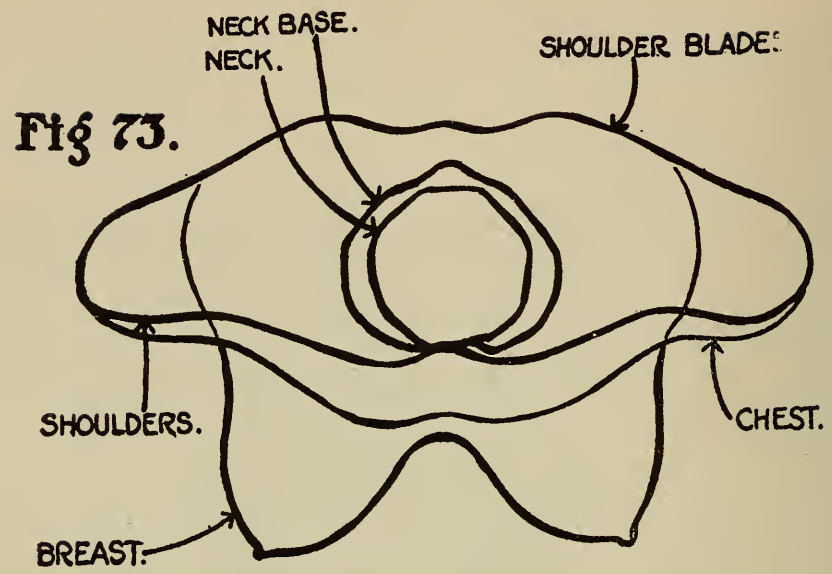


Fig 73.

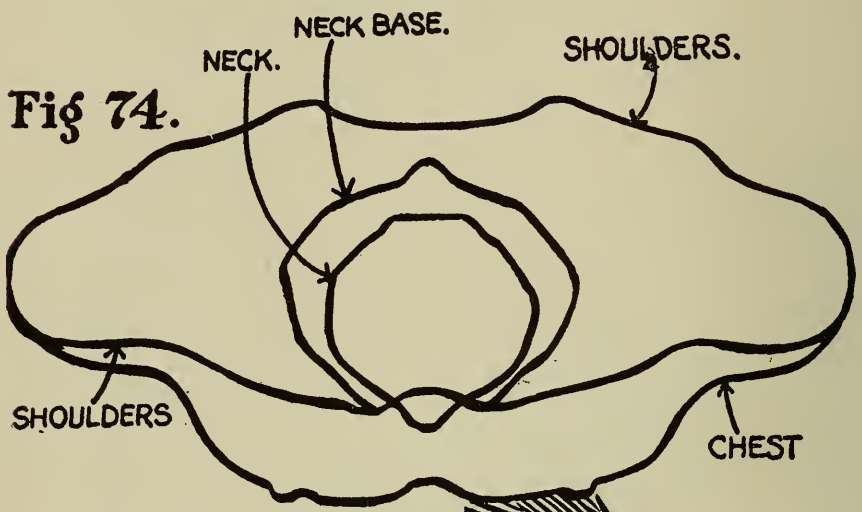


Fig 74.

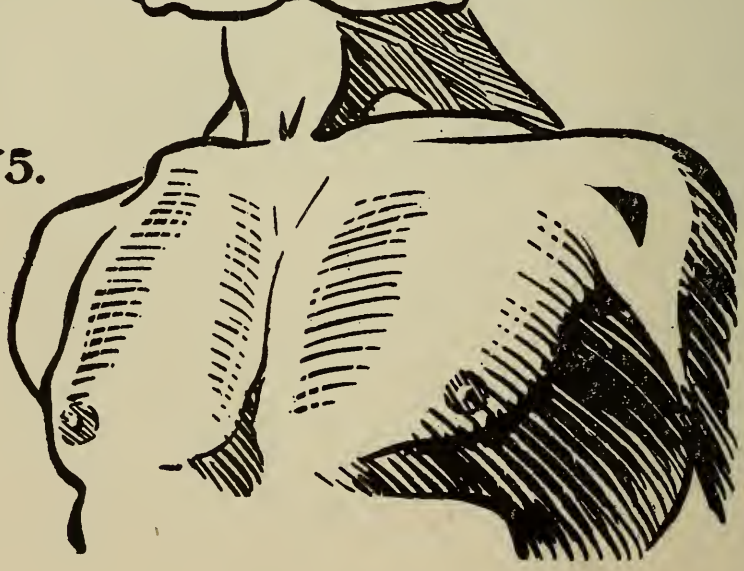


Fig 75.

PART TWO—FACIAL EXPRESSIONS
Portrayal of the Human Emotions

LESSON 14.—THE FACIAL MUSCLES

The universal language, which every race can understand, is Facial Expression.

"The capacity of expression," says Sir Charles Bell, "is bestowed as a boon; a mark of superior intelligence, and a source of enjoyment; its very nature is to excite sympathy; it radiates and is understood by all; it is the bond of the human family."

It is nature's intention that we express ourselves to our fellows by facial expression as well as with the voice. We show our feelings and frame of mind often more honestly through the former than the latter.

Most of the movements of the body are voluntary. Many of the facial muscles, however, are not controlled so much by the will (except when trained, as in actors and actresses), but are moved by emotions beyond the power of the will.

Expressions of the mind on the countenance can enoble or degrade it; for one's virtues and vices are indelibly engraved thereon. Like sculptors, with chisels and mallets in their hands, Hardship, Bitterness, Worry and Vice, each leave their peculiar marks upon the face, each time you permit their presence. Likewise the deft hands of Love, Spirituality, Happiness and Determination are modeling their characters on the countenance every time you give them opportunity.

These facial muscles that express the emotions deserve particular study on the part of the modeler. Most muscles of the body swell up when contracted, as for instance the biceps of the upper arm. Most of the muscles of expression, however, are slender

and do not swell up noticeably. Their actions are seen principally in the wrinkles, lines, folds and formations produced on the skin, especially about the eyes and lips.

Each emotion has its own peculiar expression, the same muscles being used in every face. Often but one muscle is used to express an emotion, and the modeler by changing a few lines can give it the expression desired.

We shall study these muscles as they appear contracted when under the influence of an emotion and not as they are when the face is normal and when the muscles are in repose. However, if a person continually sneers, or smiles, or frowns, or takes on any such expression habitually, the features will eventually change and take on that expression as a permanent one. That is how character becomes engraved on the human face, so that those who know physiognomy, and can read the expressions of the emotions, can readily determine what manner of man resides within. Careful consideration of this subject when modeling will train the modeler in reading character in the face. It will also train him to control his own facial expressions so that he can take on the appearance of almost any emotion—the first requirement of a good actor, especially on the screen.

All muscles on one side of the face have their counterpart on the other side, and it should be understood that when the action of a muscle is explained, it refers to both the right and the left muscle.

Muscles of the Face and Neck

(See Diagram on Opposite Page)

A—Levator of the Upper Lip.....the Sobbing Muscle.
B—Levator of the Angle.....the Sneering Muscle.
C—Zygomaticus Major.....the Laughing Muscle.
D—Zygomaticus Minor.....the Grief Muscle.
E—Depressor of the Angle .....
.....the "Down in the Mouth" Muscle
F—Depressor of the Lower Lip; the Disgust Muscle.
G—Levator of the Lower Lip; the Contempt Muscle.
H—Orbicularis Oris.....the Kissing Muscle.
I—Pyramidalis Nasi.....the Menacing Muscle.
K—Compressor of the Wings.....the Lewd Muscle.
N—Buccinator.....the Trumpeting Muscle.
O—Common Levator of the Upper Lip and Nose.....
.....the Weeping Grief Muscle.
P—Levator of the Upper Lip....the Sleeping Muscle.
Q—The Tensor of the Lids.....the Waking Muscle.
R—The Superior Orbital of the Orbicularis Palpebrarum.....the Reflection Muscle.
S—Occipito Frontalis.....the Surprise Muscle.
T—Temporalis.....the Masticating Muscle.
U—Masseter.....the Determination Muscle.
V—Digastricus.
W—Digastricus.
X—Sterno-Hyoideus.
Y—Omo-Hyoideus.
Z—Thyro-Hyoideus.
1—Stylo-Hyoideus.
2—Sterno-Cleido-Mastoid.
3—Trapezius.
The Corrugator Supercilii, the Pain Muscle; this Deep Muscle lies under the "R" Muscle, above the eye.

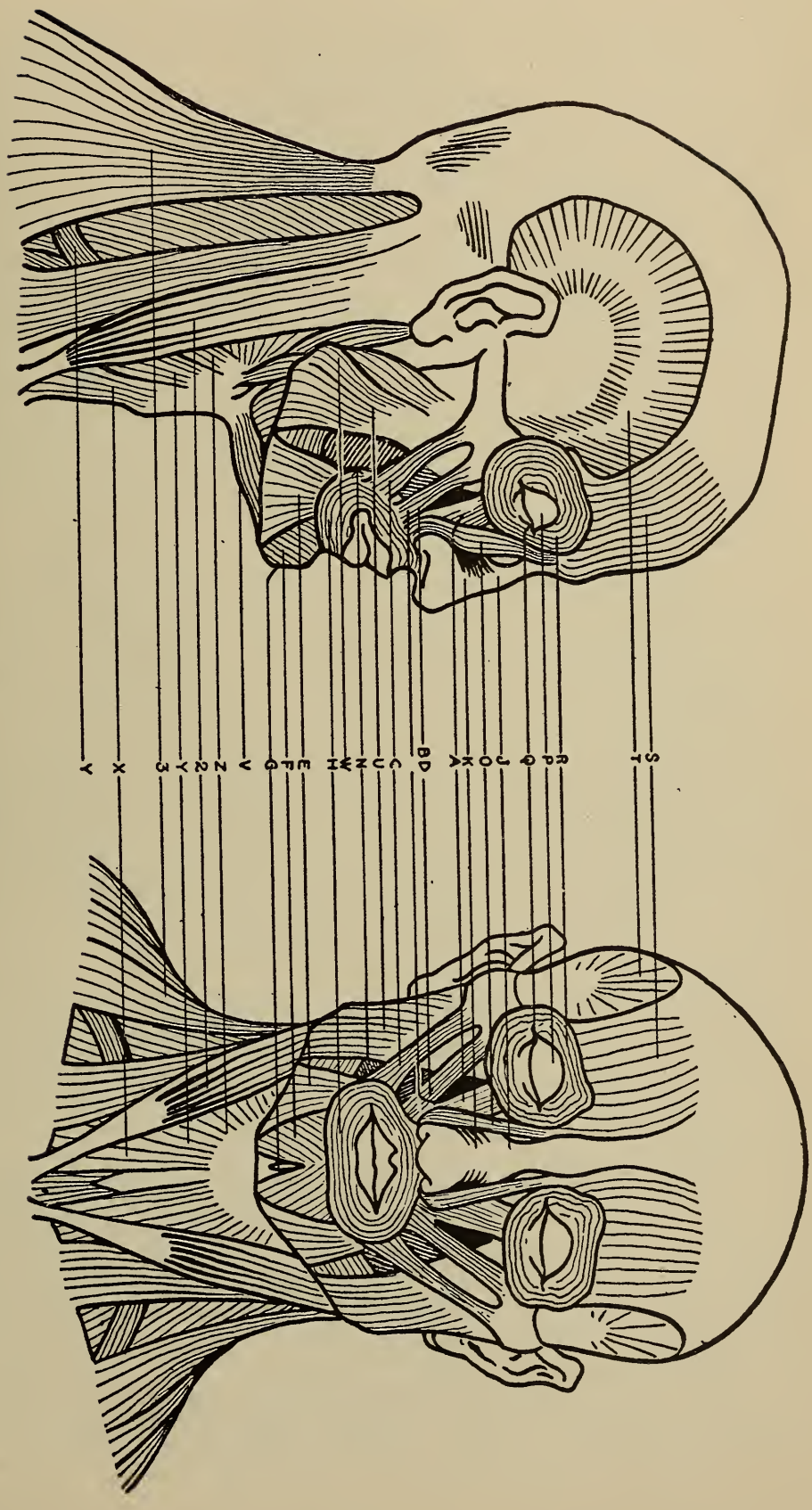


Fig 100.

LESSON 15—THE HAPPY EMOTIONS

Muscles used in laughter and kindred emotions incline the features upward and outward, especially by drawing up the lines of the mouth and eyes.

The muscle of laughter originates at the cheek bone and runs obliquely to a point near the corner of the mouth. (See Figure 100). Hence, its contraction draws the corners of the mouth toward the cheek bone, namely, upward and outward. This widens the mouth and tightens the lips, showing the upper teeth only, the lower lip being pulled up so it covers the lower teeth.

The ridge of tissue (naso-labial) extending downward and outward from each side of the nose becomes raised up and out, a deep crease beneath it forming a curve that is concave upward and outward until on a line with the mouth and below that concave upward and inward. The skin of the cheek is crowded up to the cheek bone and forms crows-feet—folds which radiate out at the side of the eye. This produces the effect of the outer side of the eye being raised. The eyes are bright and sparkling. Drawing up of the cheeks raises also the wings of the nostrils, widening the nose and making it appear shorter. Fine wrinkles run horizontally across the bridge of the nose.

The lower eyelid is raised slightly upward which causes creases at the outer corner of the eyes and just below the eyelids. Pressure of the cheeks against the lachrymial (tear) gland of the eyes causes tears in laughter. (See Figure 101).

This is the expression of laughter, and a broad smile, which, as the name suggests, widens the

Fig 101.

Laughing.

Fig 102.

mouth, and shows the teeth. In a slight smile, a mere lighting up of the face, we perceive just the starting of the expression. In a contented or happy face we see just a relaxation of the mouth, a slight drawing back of the lips, a brightening of the eyes, and often a dimpling of the cheeks.

Laughter is the expression of merriment, happiness or joy; a smile denotes cheerfulness, contentment or pleasurable feelings. Yet a smile or laugh is sometimes a mask used to conceal an opposite frame of mind—shame, sorrow, or even anger.

Cheerfulness. The cheerful optimist habitually wears the corners of his mouth up, even when not actually smiling. His head is erect, none of his features hang down, and his face expands. His eyes are clear and bright. His eye brows are arched somewhat. His brow is smooth without the trace of a frown. Permanent laugh lines under his eyes stand ready to deepen into a smile. By no conscious contraction of his brow muscles can this man frown, for he has lost control of them through disuse. For when he strikes a snag he grits his teeth and grins. When knocked down he comes up smiling. He sees the futility of worry and his philosophy is simply "Nothing Matters Much."

The Kiss Muscle is oval in shape, surrounding the entire mouth; contraction of its internal fibres, (near the red lips), closes the mouth; contraction of its external fibres (near the nose and chin) projects the lips forward, as in kissing or in pouting.

The firm closing of the mouth gives an expres-

sion of determination and force, while a habitually loose and open mouth suggests a weak will and character.

Pouting is a sign of sulkiness in children, but sometimes it expresses shyness only.

LESSON 16—THE SAD EMOTIONS

Muscles used in expressing sorrow, pain, sadness, disdain, etc., incline the features **downward and outward**, especially by drawing down the lines of the mouth and eyes.

In dejected people, the cheeks, the jaw, the eye lids and the mouth angles all droop down and in fact the entire head hangs down on the chest. "Faces fall" on hearing bad news and "a long face" is a sign of gloom.

The muscle of grief lies between the laughter muscle and the sobbing muscle, originating at the orbit under the eye and extending down to the lower lip. (See Figure 100). Their contraction pulls up the middle of the upper lip, and not the two corners at all, causing the corners of the mouth to droop, and the naso-labial folds to be raised and form a deep crease with a curve that is concave downward and inward; all of which being directly opposite to the lines produced by the laughing muscle.

The eyebrows are oblique, made so by the inner eyebrows being raised, producing a sharp bend near the inner end of the eyebrows. The oblique eyebrow (in which the inner part is raised) can be made voluntarily by knitting the eyebrows together and by producing a puckering up near the inner end of the eyebrows, at the same time raising the eyebrows at this point by pressing up with the fingers. This will also produce a characteristic grief forehead. (See Figure 107).

Horizontal wrinkles usually appear on the center of the forehead but never across the entire brow.

Vertical wrinkles also appear between the eyebrows, converging into the lowest horizontal furrow.

Grief.

Fig 108.

Fig 107.

The lips are slightly separated in grief, while in pain the lips are usually pressed together. Varying in its intensity the above expressions can register mild sadness, passive sorrow and violent grief. Few people can voluntarily contract any of the grief muscles when not in a sad frame of mind, whereas nearly all can bring the laughter muscles into play at any time. Nature has made it hard to appear sad and very easy to look happy and gay.

The muscle of sobbing originates in the inner border of the orbit of the eye just inside the grief muscle and descends straight down to the center of the upper lip, a part of it being attached to the wings of the nose. It raises the middle of the upper lip, causing the corners to droop down and out like the grief muscle, but even more pronounced. It also raises the wings of the nose, opening the nostrils wider. It causes a deep, straight furrow under the naso-labial ridge that extends down from the side of the nose. This produces the expression of weeping grief.

The eyes are partly closed, causing vertical furrows between the eye brows and wrinkles around the eyes. The pyramidal nose muscles contract producing horizontal wrinkles just above the bridge. The cheeks are not raised as in laughter for while the upper muscles try to raise the cheeks, the muscles of the lower jaw are tugging at them also. (See Figure 109).

The "down-in-the-mouth" muscles are attached near the corners of the mouth and extend outward and downward to the jaw bone. It depresses the corners of the lip down and out, and also draws down

Fig 109.

Crying.

Fig 110.

the lower part of the naso-labial furrow, making it curve around a drooping lip which causes the upper part of the naso-labial furrow to straighten out. The lips protrude somewhat, especially the lower, which is arched and elevated to produce a contemptuous look. The opening of the eyes is reduced to a mere slit in producing the above expression. A slight contraction produces **langour** or **sadness**; and a full contraction produces **contempt, disdain, despondency** or **extreme discontent.**

It is the habitual expression of a melancholy, dejected person and all who are "down-in-the-mouth." When accompanied by knit eye brows it suggests moroseness or pain. If the eye brow is raised and forehead furrowed horizontally, it denotes mental anguish, debilitating pain or utter discontent according to the predominating cast of the features. In sadness or mental depression, the features are more limped and relaxed, and hang down more than in passions like lamenting grief and utter contempt.

The muscle of pain is a deep short muscle under the summit of the eye brow used to draw the eye brow inward and slightly upward. This causes a sharp bend in the inner curve of the eyebrow which in turn produces horizontal curved furrows in the center of the forehead, and two vertical furrows between the eyebrows. This alone can produce an expression of pain and, if accentuated still further, produces an expression of agony.

There are, however, many other characteristics that can be exhibited to show bodily pain. The jaws fixed and compressed, the lips drawn tight and stretched, nostrils dilated, eyes wide open, veins of forehead outstanding, the muscle of intensity producing folds in the neck and depressing the corners of the mouth. (See Figure 117).

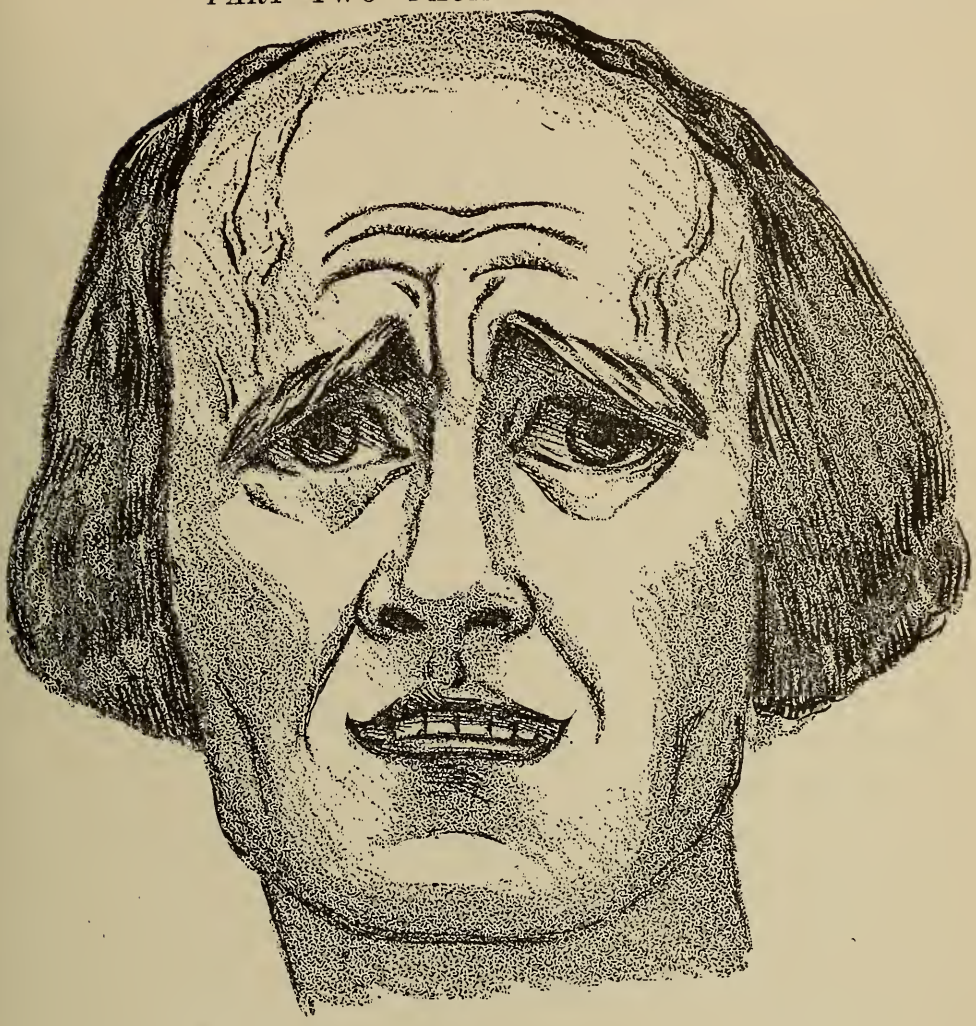


Fig 117.

Pain.

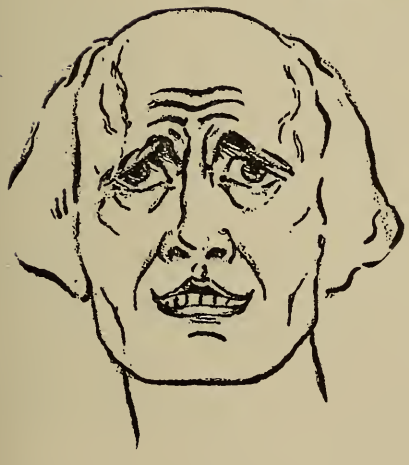


Fig 118

LESSON 17—THE ANIMAL PASSIONS

In anger, the jaw is shut tightly, the mouth is compressed, the forehead bears a frown, the head is carried erect and the nostrils are dilated and their wings are raised. (See Figure 111).

The masseter muscle on each side of the lower jaw, raises it and presses it tight against the upper jaw. (See Figure 100). During violent passions, such as anger, a man clenches his jaw; this muscle then stands out prominently on the sides of the face. It can be used to depict a strong determined face, and to express anger, hatred, brute force and power.

The front edge of this muscle is thick and heavy and so in thin people the check inside of these muscles are sunken.

Hatred varies in its expression, according to the one it is directed against. If the offending person is insignificant, it becomes contempt, scorn or disdain, if all powerful, hatred becomes terror; if our equal, it becomes indignation or rage.

The muscle of menace when contracted produces short folds, running horizontally between the eyebrows, and depresses the inner eyebrows slightly. It expresses hardness and aggression and should be used on figures in a menacing attitude. In fact, any shadow across the space between the eyebrows suggests harshness. Persons whose eyebrows meet, have a stern severe look at first glance, although they may be most gentle and genteel. A frown covers the forehead during this expression.

In jealousy the eyebrows are knit and lowered, the upper eye lid is raised so high that it is hardly visible, a dark frown covers the forehead, the lips are

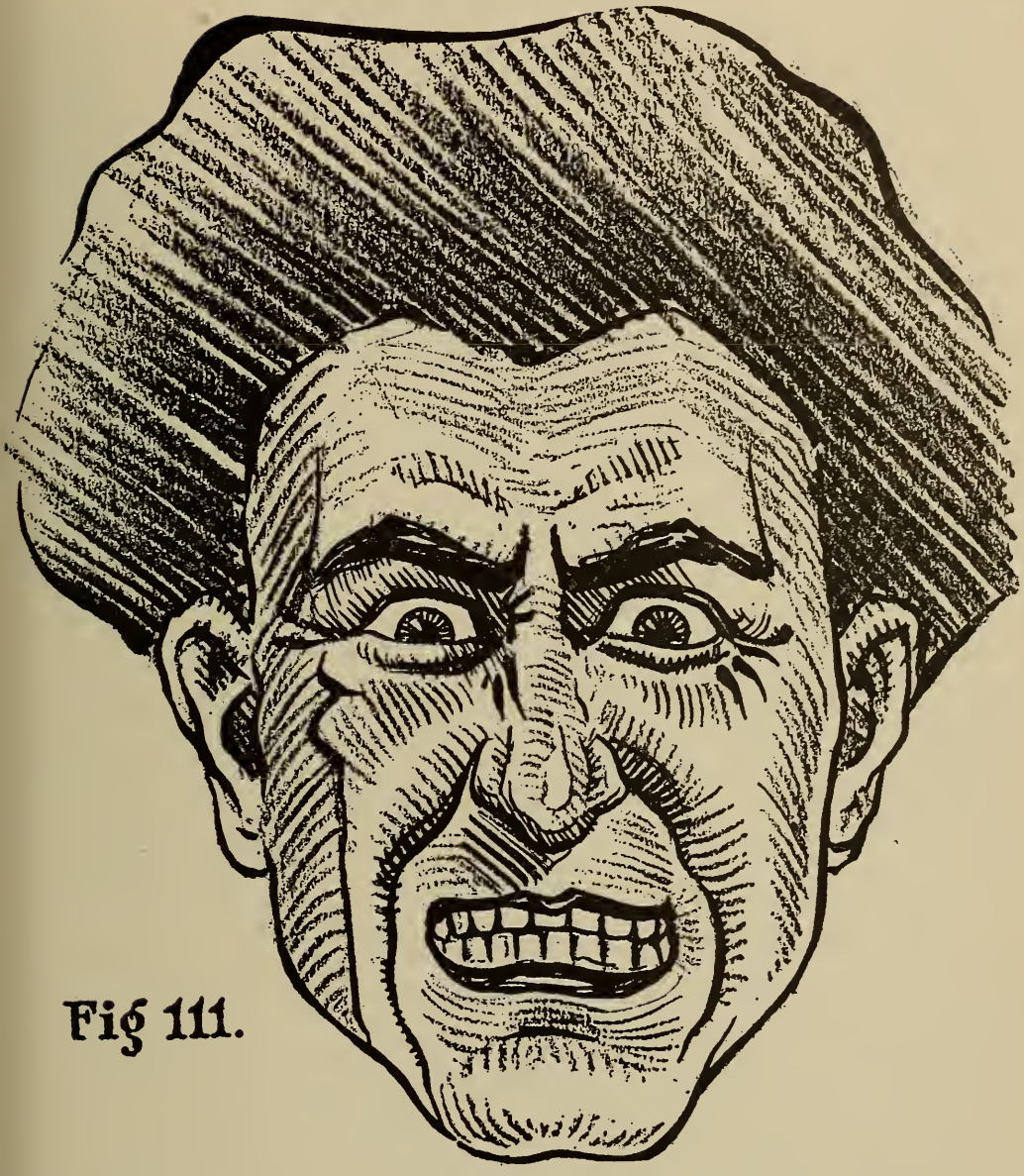


Fig 111.

Rage.

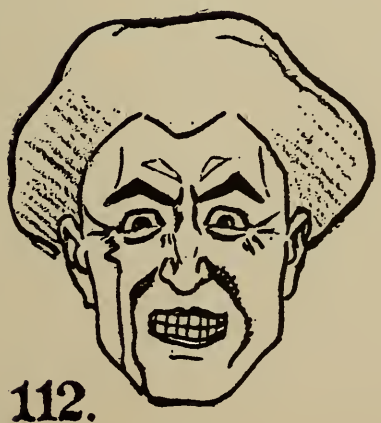


Fig 112.

compressed against the gums, showing the teeth fiercely. There are other expressions but this passion is so varied in quality and quantity, the other expressions vary greatly.

The sneering muscle runs along the nose and is inserted in the lip just above the canine tooth. When contracted it draws back the lip at this point and reveals the canine. Only one side of the face is acted upon at once. A furrow is produced in the cheek and strong wrinkles under the eye, on the same side of the face as the exposed tooth. This is the side which is exposed to the person sneered at and the face is half turned in the opposite direction. This expression can be exhibited alone, or in conjunction with that of contempt or anger. The sneer exhibits the animal nature in us and is analogous to the snarl of the dog or wolf when they, too, show their canine teeth. (See Figure 115).

The muscle of lewdness lies across the bridge of the nose and extends on either side to the cheek. Its contraction draws up the skin of the nose and nearby cheek, produces a series of vertical folds on the nose. This produces a part of the expression of lasciviousness or lewdness. Large protruding lips, and a thick ridge across the bottom of the nose (over the tip and the wings) help make up this expression.

Fig 115.

Sneer.

Fig 116.

LESSON 18—OTHER MENTAL STATES

The muscle of surprise is the frontalis, a wide flat muscle covering the forehead. (See Figure 100). When contracted it causes three or four horizontal furrows across the forehead. The top ones are deepest and run uninterruptedly across the forehead, while the lower furrows have their course broken in the center of the forehead and curve downwards, corresponding to the normal curve of the eye brow below.

The eye brows are raised and arched, and the eyes wide open. It is for this reason that arched eye brows, as done in the modern beauty shop, give an appearance of alertness.

Attention is expressed by a mild contraction of the frontalis, a greater contraction registers surpise, a still greater, astonishment, a full contraction, stupified amazement (See Figure 103).

The supple skin of a child or a young woman does not permit wrinkles when the frontalis is contracted and so attention or astonishment can be expressed on such faces only by an extreme curve and rise of the eye brows and an open mouth.

That common expression "in open-mouth amazement" is physiologically correct, for the mouth is opened slightly in surprise, and wide in astonishment or amazement.

A look of admiration is similar to the expression of surprise, except that the mouth instead of being open, is almost closed and expanded into a smile. The eyes brighten, instead of being blank as in surprise.

Fig 103.

Surprise.

Fig 104.

Reflection.

The muscle of reflection is under the eyebrows, and of similarly curved shape. (See Figure 100). When contracted it straightens out, causing a slight lowering and straightening of the eyebrow and producing two deep furrows running up and down between the eyebrows. Otherwise the forehead is smooth. The eyebrows are knit, which conveys the idea of deep thought, and the eyes are partly covered up. This expresses reflection, and is the mental state just the opposite of attention, and by comparing Figures 103 and 105 it will be seen that their expressions too are diametrically opposite.

In fear, the forehead is wrinkled horizontally, the eyebrows are arched and raised to the highest point, eyes are wide open, the eyeballs protruding with their pupils greatly enlarged; the nostrils are widened and their wings raised, cheeks are hollow, the jaw is lowered, although the lips cover all but the edge of the teeth and exposing the tongue. The corners of the mouth droop down. The platysma, the muscle of intensity, contracts, producing folds of skin across the neck. The sterno-mastoid muscles stand out like cords. (See Figures 119 and 120).

In terror, these expressions are more intensified than in fear and is marked by the raising of the inner eyebrows knitting the brows and causing furrows between them.

The muscle of intensity lies just beneath the skin, originating in the chest, covers much of the front of the neck and is inserted in the lower jaw and lower part of the face. Its contraction depresses the lower jaw, opens the mouth slightly, pulls the cor-

Fig 105.

Reflection.

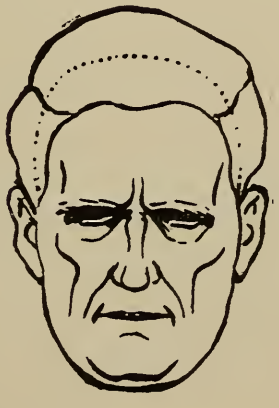


Fig 106.

ners of the mouth down and produces folds on the skin of the neck. This expression suggests terrible energy and violent effort, and will greatly intensify unpleasant expressions, particularly fear.

Disgust. The upper lip and nose are turned up, with a wrinkling of the nose; nostrils partly closed; usually accompanied by a frown. Sometimes the lower lip protrudes. As when the world was young, disgust was caused chiefly in connection with bad odors and bad tastes, it is natural that lips should open to spew it out and the nose should be raised and closed against obnoxious odors. Extreme disgust takes on an expression similar to that exhibited while in the act of vomiting. (See Figure 113).

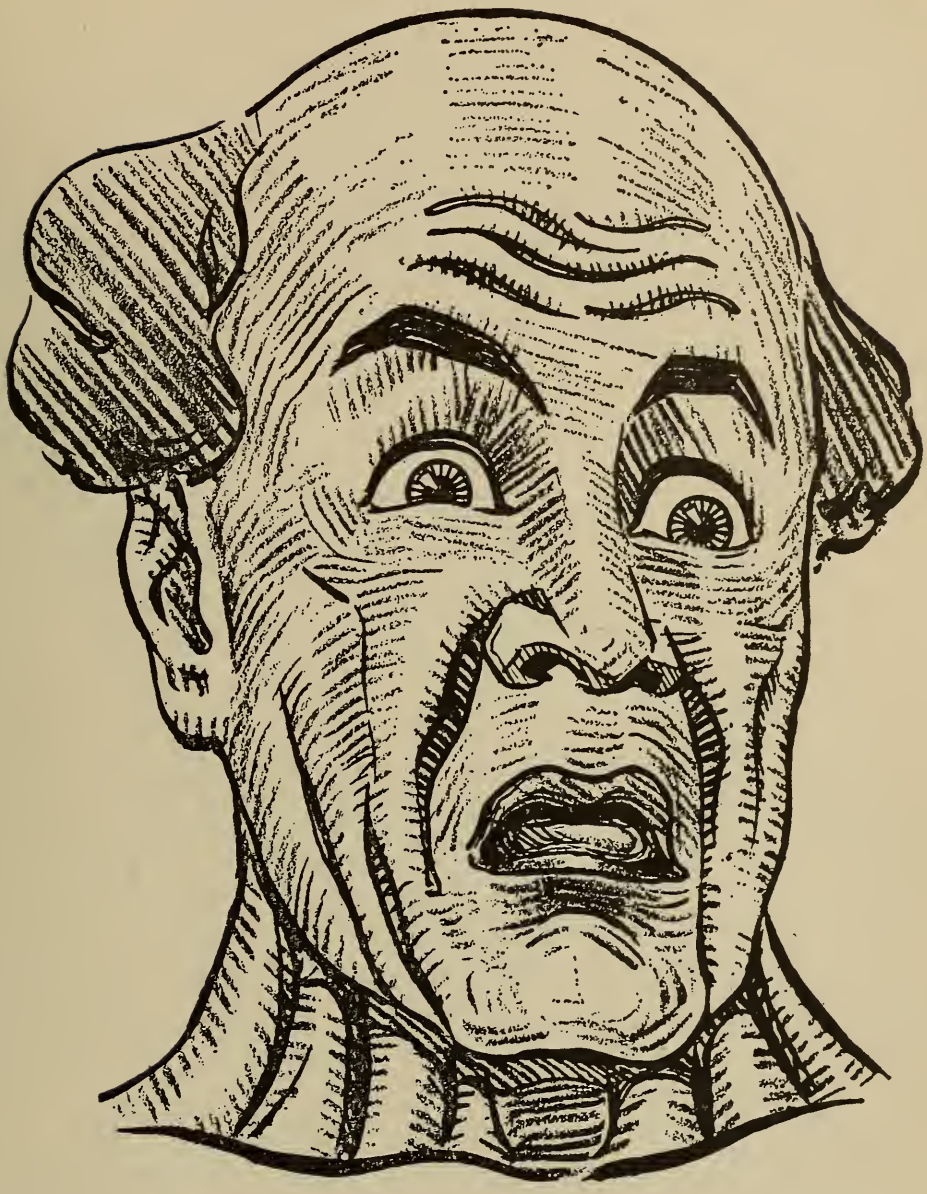


Fig 119.

Fear.

Fig 120

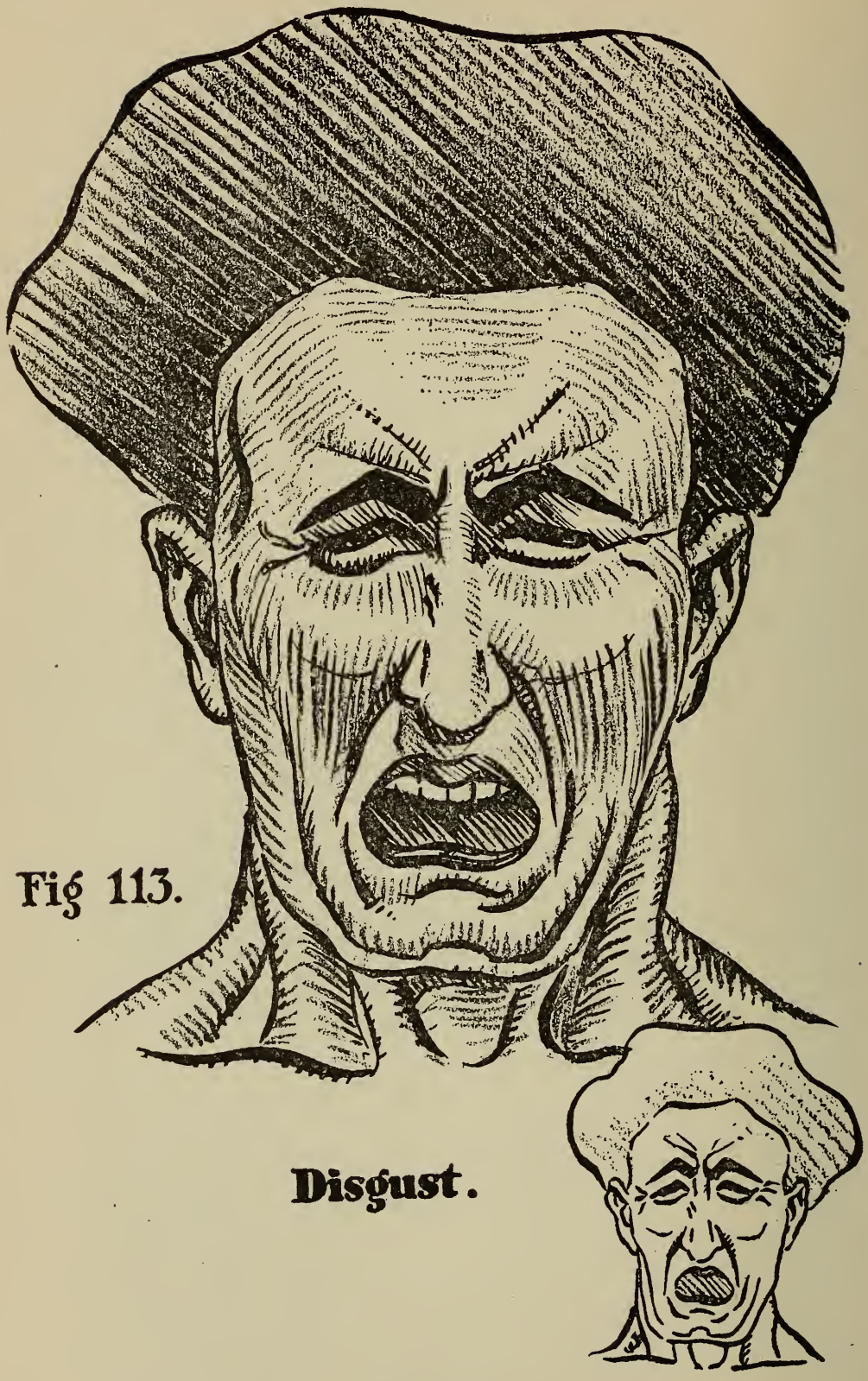


Fig 113.

Disgust.

Fig 114.

PART 3—PHYSIOGNOMY
As It Relates to Art

The primary purpose of part 3 of the Course on Modeling is to assist the modeler in producing distinct and actual types of faces—to learn to shape the features so that they may more clearly and accurately depict the character and characteristics of that type. For as one becomes proficient, he should not be satisfied with merely producing an anatomically correct head; but as an aid to his study of character and facial expressions, should determine the type of person to model and then endeavor to produce what he sees in his mind's eye. For instance, the physiognomist, in modeling a successful business man, would give him a high-bridge nose, firm compressed lips, deep set eyes, ears that stick far out and a strong chin.

Incidentally this study will assist him in the reading of character and temperament in those about him. However, the student must be reminded that the tell-tale features of the face are only circumstantial evidence. And as only a chain of circumstantial evidence can convict or exonerate a man in court, so only the sum total of evidence secured from all of the features, etc., should be considered as proof of a man's character or tendencies. For instance one may have a large back head, denoting excessive animal nature, and yet have a firm mouth, a clear eye and a strong chin, showing that the sensuous nature has been fought hard and is under the control of the will.

There are admittedly theories that are fanciful, that are involved or are empirical in Systems of Physiognomy. However, there are many established facts that have a physiological (anatomical) basis,

which have been further proven by the observations of scientific men, and experts in physiognomy, for many centuries.

It is only these facts, based on science, with which we will deal, and the student will observe that in most cases the deductions arrived at are obvious and most natural. For instance, a firm compressed lip denotes firmness, determination and self-control, whereas loose open lips indicate the very opposite.

This statement can be proven both by physiology and observation. A firm determined state of mind always results in closing of the jaw, gritting the teeth and compression of the lips. When the will takes control of the body, it tightens the reins, so to speak. Therefore, the more determined the mind and the more often the will expresses itself the more firm and compressed will the lips be permanently.

As to observation, who has not noticed that idiots, drunkards, and most negroes, all of whom have weak wills, habitually have their mouths loosely open, whereas men and women of known will power and great determination invariably have firm closed lips. Pathological conditions will sometimes, but not often, produce exceptions to the rules laid down herein, such as for instance, a mouth-breather would have his mouth open habitually and still could be firm and resolute and yet does not their open mouths detract greatly from their intellectual appearance.

Charles Darwin, the great scientist, explains the origin of this habit as follows: "The mouth is firmly closed at the commencement of and during any violent and prolonged exertion, or any delicate oper-

ation. Through the principle of association there would also be a strong tendency towards this same habit, as soon as the mind had resolved on any particular action or line of conduct, even before there was any bodily exertion, or if none were requisite. The habitual and firm closure of the mouth would thus come to show decision of character; and decision can readily pass into obstinacy."

LESSON 19—CHARACTER IN LIPS

Lips are to be judged by their thickness and their compression. Thicknesses can be divided into three general classes:

The Thin Lips which indicate a nature possessing all or some of the following traits: Mean, cruel, selfish, mercenary, ill-temper, pessimism, miserly, greed, worry, vain, and resentful; but not given much to sensual pleasure (Figure 141).

The **Full** Medium Lip indicates love of pleasure, affection, wit and generosity.

The Thick Lip indicates a coarse, sensuous, indolent, gluttonous nature. Those possessing them have an unusually developed keen taste, which accounts for the fact that negroes (who are practically all thick-lipped) make such good cooks.

The degree of compression of the lips indicates the control that the will and the mental forces have over the animal, for the animal nature has its seat in the mouth. Hence we find that:

Firm, compressed Lips indicates firmness, determination, mental activity, control, decision and concentration.

Loose Open Lips indicates uncontrolled passions and temper, weak will and character, and no mental energy.

These signs seldom fail—but to read them aright requires fine discernment. Do not mistake a compressed, full lip for a thin lip, nor call a lip heavy that is merely full and well formed. Full lips, firmly closed, belong to the ideal nature, possession warmth and love, under full control. Thus we see that the amount of lip is an index to the heart (the pure passions and the animal propensities) whereas the

amount of control is an index to the will and the mentality.

A mouth so compressed that scarcely any of the red is seen, wherein the center of the upper lip is puckered up so that vertical creases form above the upper red lip, the lips themselves being thin—this indicates weakness, bitterness, secretiveness, obstinacy, in other words, determination without a broad mind to direct it.

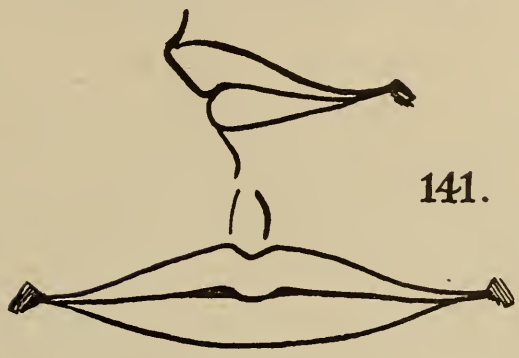
Full lips, the upper projecting over the lower, which is firmly compressed, with considerable of the red membrane showing with but a shallow hollow between the lower lip and the chin, indicates a loving passionate nature. (See Figure 142).

On the other hand, heavy lips, with the lower protruding beyond the upper, both loose and swollen like a negro's, a deep hollow between the lower lip and the chin, indicates a coarse sensuous animal nature. (See Figure 143).

In the criminal, the entire jaw often extends out one-half inch more than normal, so that the top teeth miss the lower by half an inch, causing the lower lip to protrude far beyond the upper lip.

The mouth muscles, being easily controlled and very flexible, can take on as a permanent expression, the expression of any emotion that is persisted in. People who are "down in the mouth" soon find the corners of their mouth drooping; if their lips curl up in contempt often they will soon assume that position, a happy nature will wear the corners of his mouth up.

The emotions that play upon the face, as described in Part Two on Facial Expressions, leave their permanent marks on the features and should be especially considered. There are fine wrinkles permanently under the eyes of the man who laughs much; two deep vertical furrows between the eyebrows of the man who thinks and concentrates much; short horizontal wrinkles in the center only of the forehead of the man who worries much; and so on, just as delineated in Part Two.



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LESSON 20—CHARACTER IN NOSES

It is the bridge and the tip of the nose that is most indicative of character; that is, (1) the size and height of the bridge of the nose and (2) the shape and the direction of the tip. There are three general types; the Convex or Roman nose, the Concave or Upturned nose, and the Straight or Greek nose. Usually a large shapely nose indicates high mentality and great physical powers.

The Convex, Roman nose, found on generals, business men, executives, statemen and other leaders, thinkers and fighters, indicates ability to command and supervise wisely. On such noses the bridge stands out prominently, producing a sharp bend. When this bridge is very high, near the root of the nose, as in Figure 152, it indicates great executive ability; also aggressiveness, self-sacrifice, mental energy and a strong desire to fight for others. As this bridge lowers, but still remains visible, as in Figure 153, it indicates these same qualities, but in lesser degree.

When the bridge becomes so low that it is not visible, causing the tip of the nose to be upturned, just the opposite traits are exhibited, and instead of a desire to fight for others, we find a selfish desire to protect oneself from dangers. This is called the concave nose. (See Figure 154).

The Straight (and the classical Greek) nose, without a hump or curve from root to tip, indicates elegance and refinement, love of art, architecture, poetry and things esthetic, as well as love of luxury and ease. (See Figure 155).

The Hebrew Curved nose is one type of the

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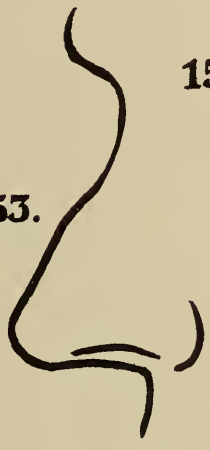

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convex nose; it has one full convex curve from root to tip of nose, and indicates business sagacity, acquisitiveness and a grasping nature. (See Figure 156).

A Pug nose (stubby and tilted upwards) indicates a low, pugnacious, coarse and quarrelsome nature. It is the nose of the pugilist and the low minded. (See Figure 157).

If the tip of the nose is wide and full, a trusting, confiding, frank and open nature is indicated. On the other hand, if the tip is long and pointed, it indicates a conservative, cautious, cold nature; if this sharp nose points downwards, as in Figure 158 hanging lower than the septum (the cartilage between the nasal passages) and the nose above, is concave, it indicates an inquisitive, suspicious, sly and scheming nature. If the sharp tip tilts upwards, as in Figure 159, it indicates inquisitiveness also, but it is less shrewd and harmful, such as idle curiosity.

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148.

LESSON 21—CHARACTER IN CHINS

Chins are to be judged both by their formation and their position. There are three pure forms, but any two of these are often blended together into one chin:

The Round Fatty type, which indicates good-nature, benevolence, pleasure loving, gluttony, and often a weak will. (See Figure 146).

The Oval Muscular type indicates physical strength and health, and good taste. (See Figure 147).

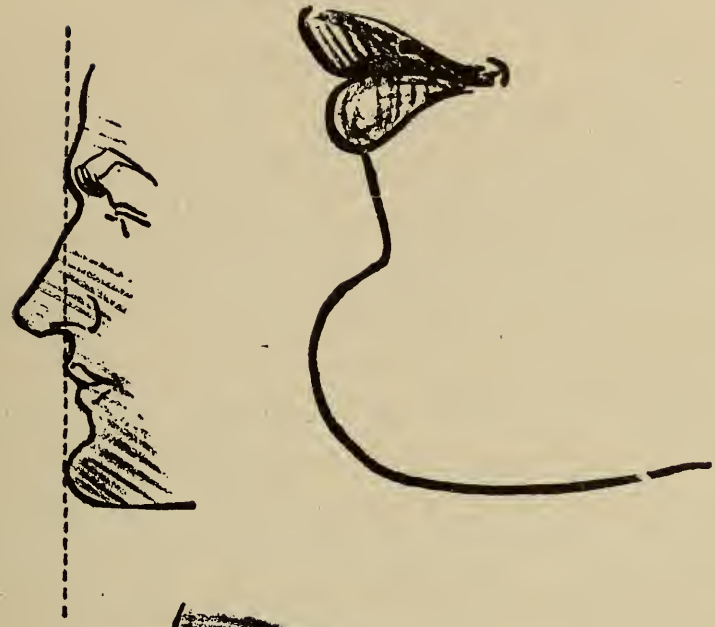
The Square, Broad Bony type indicates a positive, precise, systematic, persevering, strong-willed nature. (However, bear in mind that mere bigness of jaw or chin indicates a low mentality and a high degree of sensuality. (See Figure 148).

There are three positions of the chin:

The Normal chin, in the male, is perpendicular with the upper lip and the eyebrows, that is, on a straight line with these two points. It is the ideal chin both from the standpoint of beauty and of character. A woman's chin, however, normally and naturally recedes slightly from that line, indicating only that inherent feminine gentleness has tempered the aggressive physical powers. If a woman's chin protrudes, she has very much the nature of a man, and is firm, self-reliant and persevering. (See Figure 149).

The Receding chin indicates a negative, weak-willed, easily discouraged man of limited physical strength and force. (See Figure 150).

The Projecting chin indicates a positive, persevering, firm nature, who is saving to a fault. If it protrudes very much, it also indicates a penurious, avarice nature. (See Figure 151).



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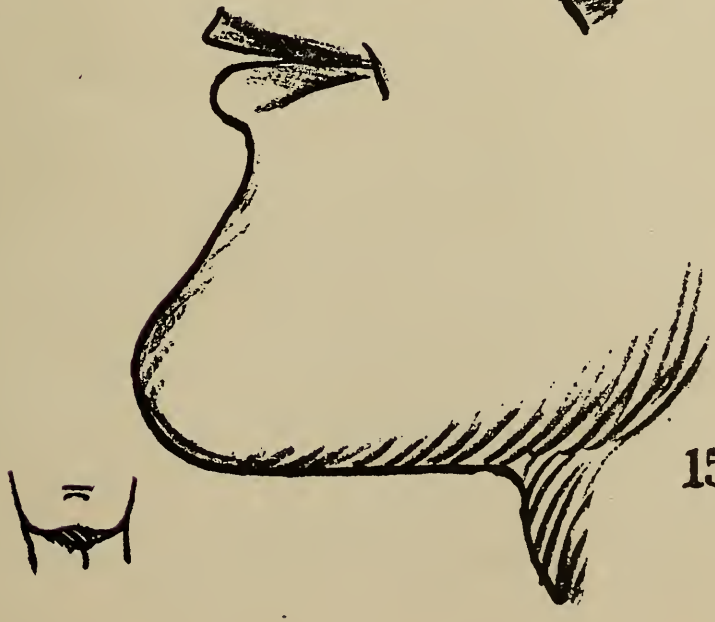

151.

LESSON 22—CHARACTER IN EYES

The normal eye, indicating a normal developed mind, is medium in size, rather deep set, the outer corner very slightly higher than the inner, top and bottom edges of the iris covered by the eyelids. Such eyes also are the badge of morality and honesty. (See Figure 160).

Deep Set eyes, being nearer the brain, record what they see quicker; such eyes belong to a quick, accurate, keen observer; while one whose eyes protrude usually has dull perceptions. The deep set type likes introspection; he sees with the mind's eye too. The full prominent eye is sensual and delights in beholding physical beauty—a pretty girl, a gorgeous sunset, and the like. In deep set eyes the upper lid is folded back far under the eyebrow bone, so that only the edge is visible.

The Oblique eye, slanting upward and outward, more than normally, with the eyebrow in the same direction, and with the eyeball rolled upward so that white shows between the iris and the lower lid, indicates a crafty, dishonest, treacherous, and often cruel, nature. (See Figure 161). When the eyes oblique inward, the inner corners higher than the outer to a marked degree, it also indicates dishonesty and deception, but seldom treachery or cruelty.

If but a narrow slit of the eyeball is exposed, as in Figure 162, a secretive, deceptive and sensuous nature is suggested. But if the eyelids are far apart, exposing the eyeball more than normally, it denotes volubility, exaggeration and unreliability. (See Figure 163).

While there is no physiological (anatomical)

160.

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basis for stating that color of eyes indicate aught, long observation by many authorities has established the following facts:

Dark eyes are invariably passionate; grey eyes or pale blue are cool, calm, calculating and shrewd; deep blue, with large pupils, indicate a clear developed mind and a true generous heart; normally brown eyes are ardent and constant; while light hazel brown eyes are fickle and hasty, although most agreeable and affectionate. Prominent colorless eyes indicate a cold, narrow, selfish, grasping nature.

The eyes are bright and sparkling when happy; dim and dull when mentally depressed; keen and brilliant during mental activity; soft and love-lit when beholding the object of its affections. All these qualities are hard to analyze and hard to reproduce, and yet the most indefinable—the love-lit eyes—what fortunate man has ever failed to read them aright when directed toward him.

Arched Eyebrows denote youthfulness and feminine qualities; straight and horizontal eyebrows denote masculine vigor and capability. Fine smooth, firm hairs, all running in the same direction, indicate a calm, keen, firm nature; whereas bushy hairs, sticking out in all directions, indicate an irritable, ill-tempered nature. Meeting eyebrows (hair across the root of the nose) belong to a frank and honest nature. Eyebrows that oblique either out or in indicate a dishonest nature.

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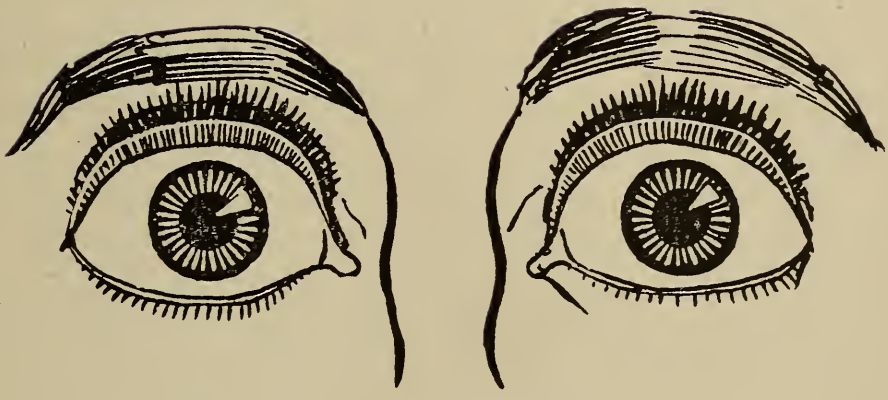


163.

LESSON 23—CHARACTER IN EARS

Each feature is the seat of some part of our mental makeup. The eyes reflect our morals and intellect; the nose gauges our executive and business ability; the mouth tells the measure and quality of our love; the chin indicates the degree of our will-power; and the ear is an index to our breeding.

There is no feature that changes so slightly from cradle to old age as the ear. Hence a man of good family, good breeding and of so-called blue blood cannot disfigure a good ear even with years of dissipation.

So a delicately shaped, symetrically curved ear that is thin, soft and almost transparent denotes refinement and good breeding; whereas an ugly, irregular, poorly formed ear that is thick, and of a coarse texture indicates a coarse, ill-breed nature. Compare Figures 164 and 165. Its size or the angle it sticks out has no bearing on it, however.

A Long Broad ear indicates business ability and if it sticks out at a great angle from the head, it usually denotes executive ability. If the ear lies near the head, it indicates a cautious, conservative and thrifty nature.

The Musical Ear is large and rounded; and has a perfectly formed rim of equal width on the rear edge of the ear, that extends in one unbroken curve from the top to the lobe. (See Figure 166).

Fig 164.

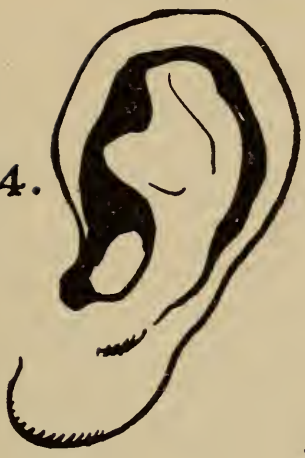
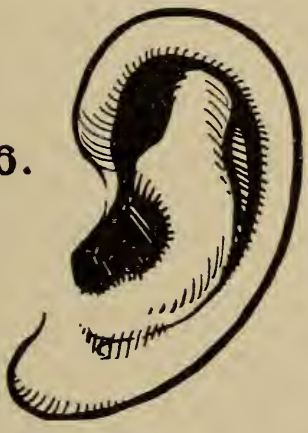


Fig 165.

Fig 166.



D - Practical, Creative ——
E - Spiritual, Impractical ·····
F - Love of Life - - - - - - - -

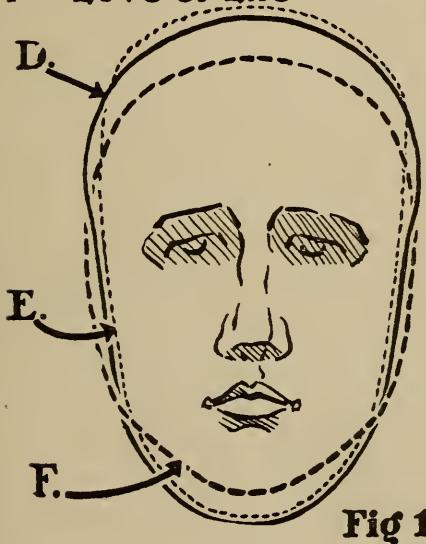
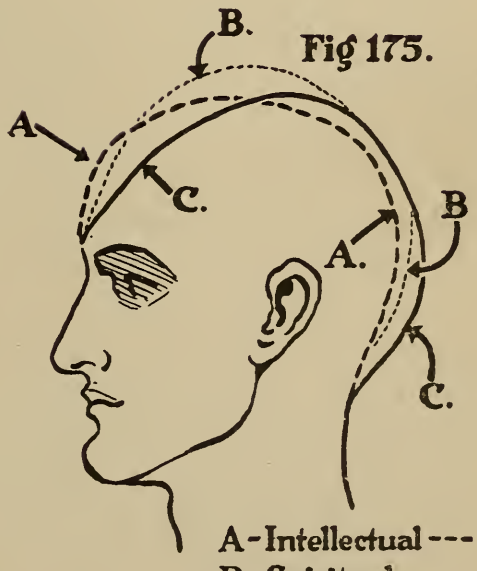


Fig 176.

Fig 175.



A - Intellectual - - -
B - Spiritual ·····
C - Animal ——

LESSON 24—CHARACTER IN FOREHEADS

The general direction of the forehead from eyebrow to the hair is the best index to the mentality beneath.

The intellectual type recedes slightly, being almost perpendicular, until within an inch or so of the hair, when it slopes back gently, this forehead is high and broad, and indicates a sympathetic, energetic, brainy executive. (See Figure 167).

A perfectly, **straight and perpendicular** forehead indicates a sluggish mind, indecision, and a cold, cheerless, unsympathetic nature. (See Figure 168).

An entire forehead **projecting out** beyond the eyebrows, either in a straight or curved line, indicates immaturity and sometimes imbecility. In the adult, it is the sign of a slow, stupid, weak, impractical mind. It is the normal shape, however, of the child's forehead, who naturally has not yet attained full development. (See Figure 169).

A greatly **receding** forehead, which slopes back from the eyebrows, as in the average negro, indicates a low, undeveloped mentality. However, if the lower half of a high forehead is almost perpendicular and only the top half recedes noticeably, then originality, wit and keen perception is indicated. (See Figure 170).

A Narrow Low forehead with receding temples, indicates a lack of originality, push and tact; often obstinate and a stickler for old ideas and methods; yet practical and faithful in any task given him to do. (See Figure 171).

The "Bumps" theory has long been exploded and

Fig 167.

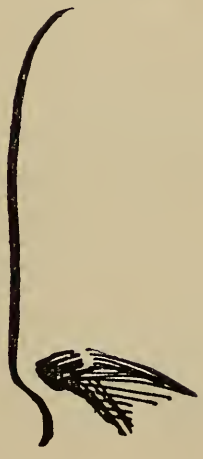


Fig 168.

proven erroneous; however, there is an anatomical basis for the following statement. An irregular surface of bumps, folds and creases, with highly developed and flexible muscles beneath, on a high broad forehead, which has two arches, the lower one projecting most, indicates a creative, clear, sound, analytical mind; one that the modeler could use in depicting a thinker. As can be understood after studying Facial Expressions, permanent vertical wrinkles alone will denote concentration and mental power; whereas horizontal wrinkles usually indicate a perplexed and disturbed mind.

Fig 169.

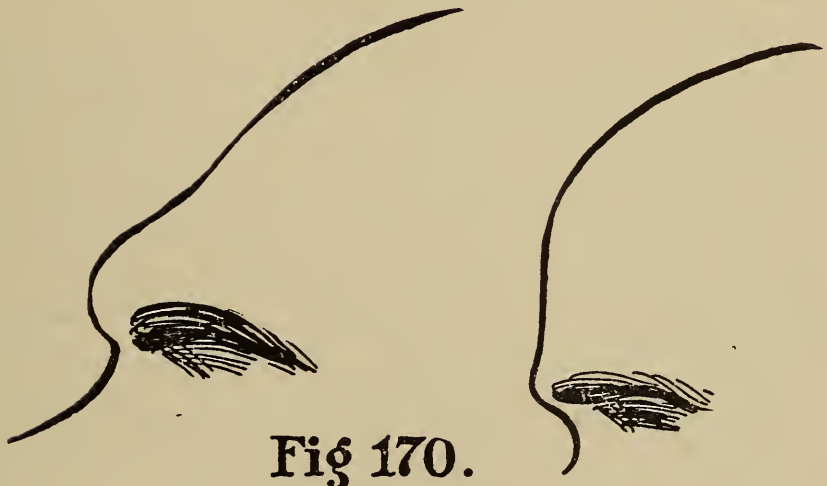


Fig 170.

Fig 171.

LESSON 25—CHARACTER IN HEADS

Skulls vary in shape according to the intellectuality of the man. A large head denotes a large brain with great physical and mental energy and strength —but it is the shape that determines in which direction this energy is being expended.

The ear is always in a fixed place and so the opening of the ear is the landmark used for measuring the shape of the head. The head possessing a normal brain, wherein the mental and physical qualities are equally developed, lies two-thirds in front of the ear orifice and one-third behind. When three-quarters or more lie in front of the ear then a high mentality and low physical powers are indicated. If one-half lies in front of the ear, and the height of the head is less than normal, then low mentality and strong sensuousness is indicated. Compare Figures 172, 173 and 174. It is hardly necessary to state that No. 172 is the ideal type, wherein both the mental and physical is developed, so that the mental holds the physical tendencies in check, and the physical provides the mentality with energy and stamina to carry on its work. The mental type, No. 173, lacks force and aggressiveness, while in the physical type, No. 174, the physical animal tendencies are unbridled.

A high, full crown indicates strong moral sentiments, such as veneration, benevolence, hope, spirituality and idealism. (See Figure 176).

A broad head, wide back of the temples, indicates a constructive, energetic, practical, creative mind of high idealism and good cheer. (See Figure 176).

Fig 172.

Breadth of head around the ears indicates love of life and a good fight, great energy and strong animal tendencies. (See Figure 176).

A full and broad upper back head, just behind and below the crown, caution, self-esteem, firmness and stick-to-it-iveness.

A full middle back head indicates a domestic and social nature in which the impelling motives are love of the opposite sex, parents, home and friends.

If the very base of the brain back of the head is highly developed, it indicates a strong amativeness, which if not tempered by social and spiritual qualities will result in a carnal, sensuous nature.

In a sentence, if the development is in the front of the head, he is intellectual, if at top, he is spiritual, if in upper back, he is reserved, if in center back, he is social, if in lower back he is sensual, if at the sides he is practical. On the other hand, where these parts are not developed, it denotes a corresponding deficiency in these qualities.

A man's head is usually larger than a woman's. The average matured man's brain measures 135 cubic inches, while the average for a woman is 125. In a general way, the brain can be measured by the hat one wears? A man wearing a size 6½ would have from 90 to 100 cubic inches of brains. For each additional ⅛-inch size, add 10 cubic inches, so that for instance, eight sizes larger, a 7½, would cover a 170 to 180 cubic inch brain.

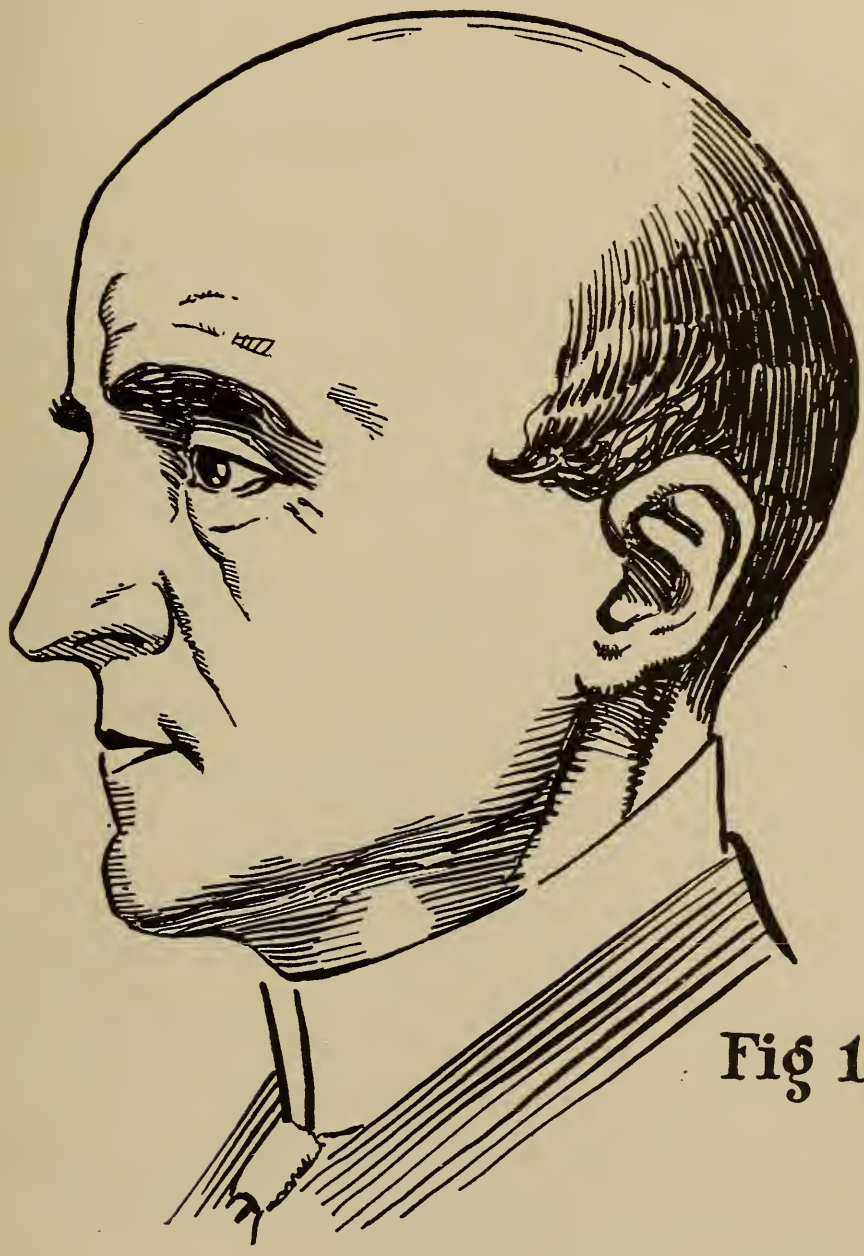


Fig 173.

LESSON 26—TEMPERAMENT

In reading the character and nature of an individual a knowledge of his temperament is also necessary. Temperament is a quality of mind influenced by the organic condition of the body; it refers to the attitude (not the development) of the mind. There are three distinct classes:

The mental type, in which the nervous system and the brain have the predominating influence.

The motive type, in which the physical, including the muscles, bones and ligaments, have greatest influence.

The vital type in which the controlling force is the nutritive system, including the digestive organs and the blood vessels.

The makeup of man is like our National Congress, and each type mentioned above can be likened to a political party. Never is a man 100 per cent of one type, but always there is one of these types that predominate. If he is 60 per cent mental and only 40 per cent vital and motive, he is of a mental temperament, and it is the mental that will control and influence his thought and actions, just as if Congress were 60 per cent Democratic, this party would control legislation. The ideal combination of course, which is, however, seldom attained, is to have no one type hold the balance of power. Such men will divide their time evenly between study (mental), work (motive) and pleasure (vital).

The predominating mental type is recognized by a slight delicate body and a large head, with a high broad forehead. The bones and the muscles of the body are small. The features are finely (often

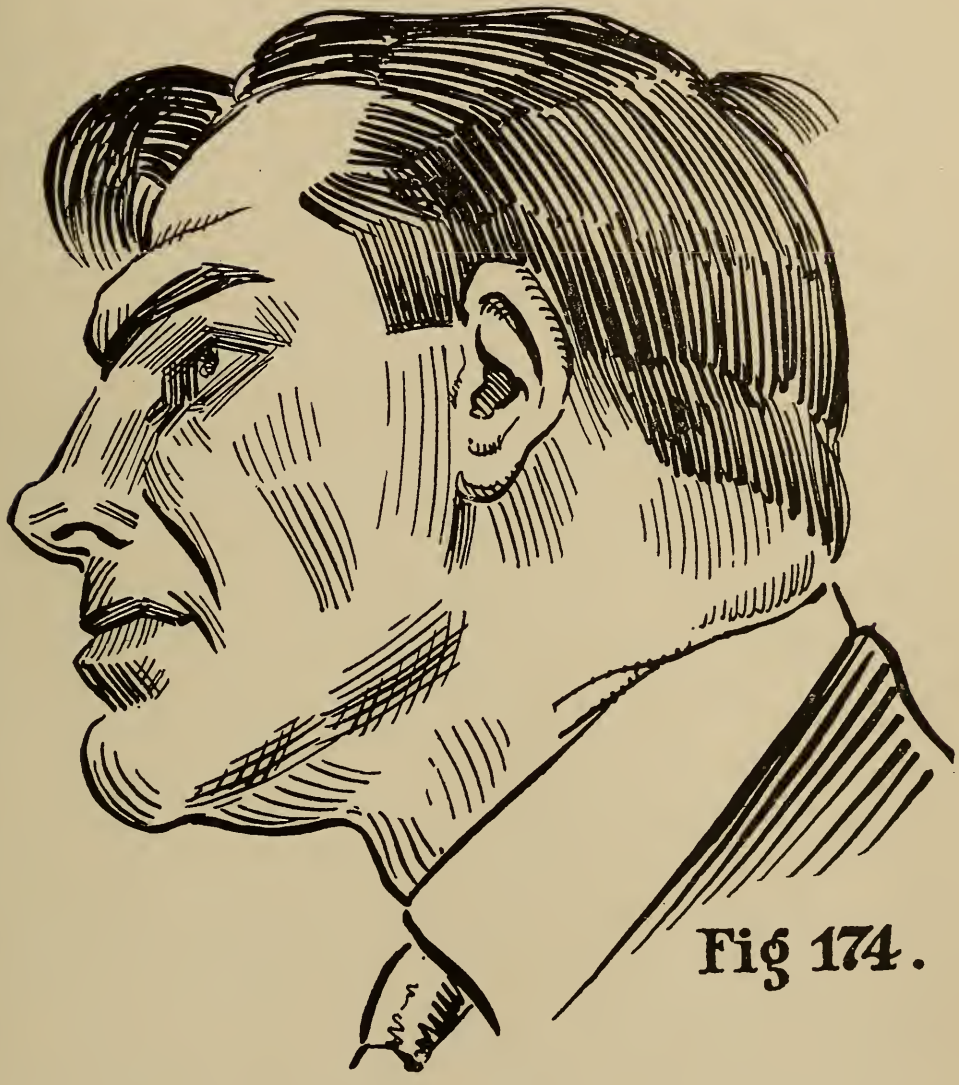


Fig 174.

sharply) chiseled. Usually nervous and high-strung. Artists, musicians, scientists, and literateurs are usually of a mental type.

The predominating motive type is easily distinguished by his large and developed muscles and bones; by a strong rugged face which includes a large jaw, a square chin, good strong teeth, rather high cheek bones and angular, but not sharp, features. This temperament is much more common in man than in woman, they usually being of large stature. The business man, the athlete, and the professional soldier is usually of this type. He is the man of action.

The vital type of man or woman is usually fat, or at any rate has loose soft tissue. Often tall, with rather large bones, but small hands and feet. The neck is thick and short, and the shoulders are wide and rounded like a woman's. In fact, the entire body has more of the rounded curves as seen in woman. Their features are rounded, which distinguishes them from the angular features of the motive and the sharp features of the mental type. Sometimes we see a blend of all three types in one face. The majority of women are of the vital type. Such men and women are lovers of ease and pleasure, and are given to excesses. They are good natured, generous and honest.

The salesman dealing with the mental type should present hard facts and arguments; in dealing with the motive type, personality will count and he must use aggressive, bull-dog tactics. In winning over a vital type of a buyer, first take him out to a good dinner, for his heart and brain can best be reached through his stomach.

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